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JANUARY 1987 No 58 £1

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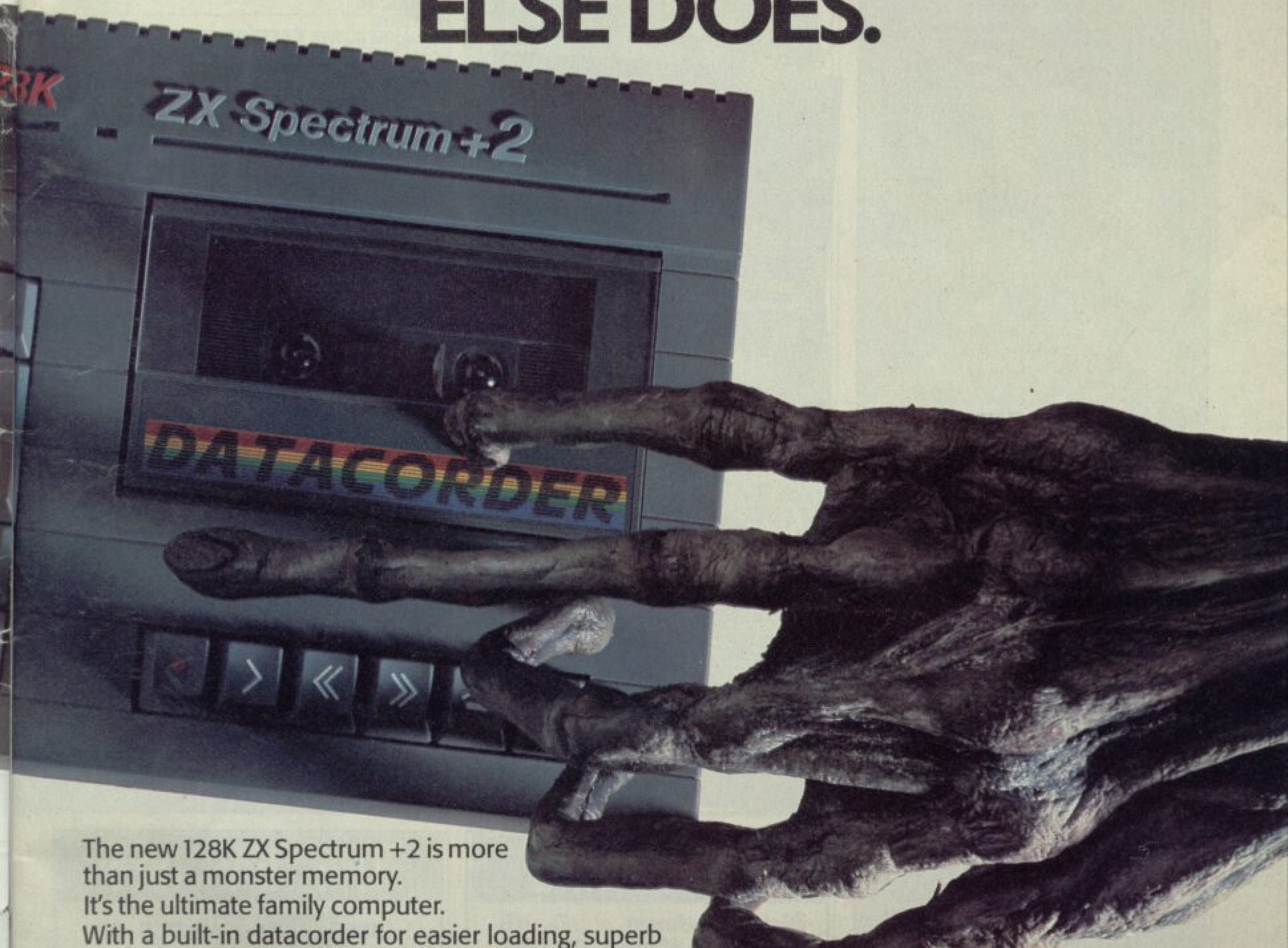
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Publisher
Terry Pratt
Telephone
01-251-6222
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Double Take


Shares



Aliens

SOFTWARE

HARDWARE

DIAGNOSTICS

THE YEAR 1986



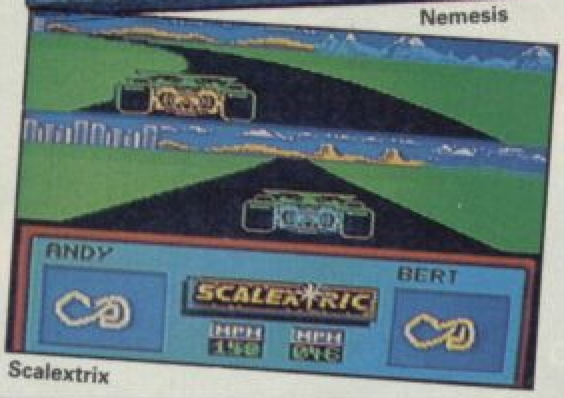
E · N · T · S

PREVIEWS

The programs of tomorrow, today! What's HAPPENING in the wonderful world of software. With Scalextric, Jail Break, Tempest, SAS Strikeforce, Kayleth, Super Soccer, Deep Strike, Legend of Kage . . .

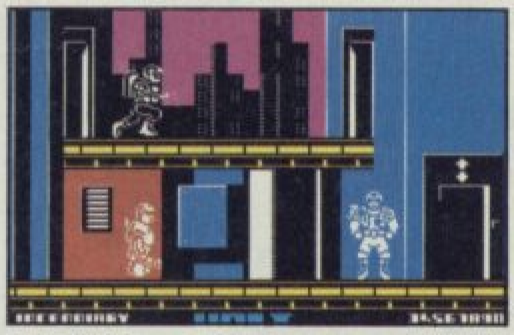


Nemesis



Scalextrix

COVER SMASH



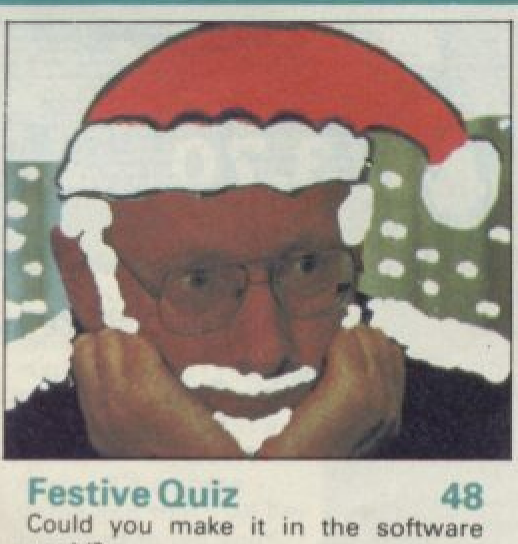
FEATURES



SURVEY

PRINTOUT

SEASONAL STUFF



COMPETITIONS

NEW FEATURE

REGULARS

NEWS

UNDER RAPS!

● **Paul Tuck has written a QL program which will be released by Realtime Software – the label responsible for the Spectrum version of** Star Glider. **It's called** Defusion **and is a multi-screen levels-and-ladders game with big, colourful sprites.**

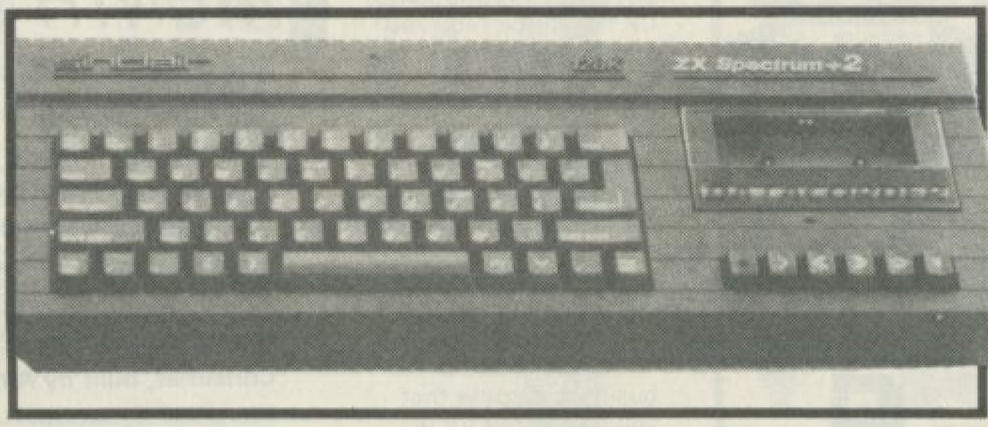
● **Design Design is completing** The Sewer **for Domark. What can one say? It's an action arcade game and will follow** Kat Trap **on to the Streetwise label**

● **Don Priestly, author of** Trap Door, Popeye **and** Minder **has just begun work on a new program, again for Piranha. It's due out in the middle of 1987 and is so top secret that neither the author nor our fishy friends would tell us what it's called. Our spies tell us, however that it's a licence and uses those massive sprites that have made Don's reputation**

● **Torus, has finished** Hive, **an alien swarm game for Firebird. The game takes you into the honeycombed core of the hive where you've got to solve a variety of door-opening puzzles to find and kill the queen bee. Since it was finished Torus, the team responsible for Firebird's** Gyron, **has split up. One member, Ricardo Pinto, is now working for Rainbird**

● **Luke Andrews of Vortex, the programming team which produced** Alien Highway, **and** TTL, **is three quarters of the way through his next Spectrum release. He says: "It's a space game and that's all I'm prepared to tell you". Cheers, Luke**

128K+2 JOYSTICK ROW



◀ **High Street stores may apply pressure on Amstrad to change its 128K+2 joystick 'standard'**

Amstrad may yet be forced to change it's daft configuration of the joystick port in the 128K+2. A row is brewing over the 'standard' between Boots and Amstrad and the disagreement contributed – along with tape head alignment problems with the machine's built-in tape-player – to Boot's decision to withdraw the 128K+2 from the shelves of some stores last month. The tape alignment hiccough has now been cured and the 128K+2 is back on the shelves but the joystick wrangle rumbles on.

The problem is that Amstrad has twiddled with the pin arrangement in the 128K+2's joystick socket so that only Amstrad's own-brand joystick will work and the Amstrad 'stick' uses the old 'Sinclair' software standard. The Sinclair standard never achieved recognition and most commercial software is written to operate with the Kempston standard. As a result of all this some commercial software available for the 48K machines won't operate from joysticks on the 128K+2.

One of those games is Uridium, from Hewson which is billed as 128K+2 compatible. However, early versions of the game would only work with keyboard control.

A spokesman for Hewson says: "There was a problem with early batches of the game but that's been sorted-out and the new version of the game is fully compatible with the 128K+2 joystick".

Amstrad appears unconcerned with problems of software incompatability. The company believes that it is the responsibility of the software houses to fall into line and adopt the Sinclair standard.

Unfortunately many software and hardware firms are no longer sure what that standard is!

Meanwhile, though, the 128K+2 is now back in Boots stores, it is thought Boots is applying pressure to Amstrad to reconsider its decision to stick with its non-standardised joystick 'standard' for the machine

SPECTRUMS TAKE OFF

The computer boom has taken off again! High street stores are now reporting greatly increased demand for machines – compared with last year.

This means the annual Spectrum shortage, which starts at Christmas and chunders into the new year, looks set to be a good deal worse this year with the 128K+2 in very short supply.

Distributors such as ADL and Lightning are finding it difficult to keep up with demand and some orders from independent retail shops are taking more than eight weeks to fulfill.

The problem seems to be occuring at the Amstrad end of the pipe-line and there's little that even the big distributors can do – except wait



ARCHERS OFF MARK

The Archers, Mosaic's long awaited adventure game version of the slow running radio soap has been threatend with the sheep dip by BBC bosses.

Production was stopped when William Smethurst, the game's co-script writer and editor of the radio program, left the BBC to join Central Television. The BBC then insisted that Smethurst's name be taken off the game's packaging.

Several days, and £1,000 later, he joined the role of the other *Archers* characters who have been sent into that great oblivion by the BBC

STARLIGHT OUT

Starlight is, a new software team set up by ex-Beyond boss Francis Lee.

Greyfall, it's first effort, is an arcade adventure with 3D isometric graphics. It'll hit the high street later this month via a tie-up with the Ariolasoft label. Then comes **Deathscape,** described by Starlight as a 'space fight simulator', which will be released in February.

Ashley Gray, Ariolasoft's managing director, says: "We are delighted to be working with Francis and his new company. Starlight is sure to become a major new force in the software industry".

We wait with bated breath



NEWS

ELITE GAMES DOUBT?

Elite, the publisher of **Space Harrier** and **Paper Boy,** has fallen foul of two major UK software houses over its plans for its 2.99 Classic budget label.

Vortex and CP Software were allegedly promised advanced royalty deals for games to be launched on the budget label. Luke Andrews, a director of Vortex, was approached last year by Elite who agreed to publish **TLL, Cyclone** and **Android II** within six months. Vortex agreed but has since heard nothing from the company. Andrews says: "They promised advanced payment on unit sales. We've heard nothing from them since. Why haven't we heard from Elite? And if they haven't been released then why not?"

CP Software is in a similar situation. 2.99 Classics offered to take four titles – **Backgammon, Bridge, Chess** and **Draughts** – for the Spectrum and Amstrad computers and was given the same six-month deal with advances on unit sales. CP has since received some money from Elite, but not what was expected.

Chris Wittington, a director of CP, says: "We've issued a writ".

Elite can either agree to make a settlement or go to the high court to attest the claims of CP and Vortex.

"It's just normal business dispute that will be cleared up in days," says Elite's Steve Wilcox.

He also assured us that, despite claims from the trade press, the 2.99 Classics label was not being disbanded. "We are obviously concentrating on Elite products over the Christmas period, but customers will still be able to get any of the Classics range." Good to know 2.99 Classics cares for its third-party clients over the boom period, Steve.

ADD-ON KEYS FOR QL

A long awaited replacment keyboard for the QL has been launched by Schon Keyboard, a company run by ex Saga sales manger Chris Smith.

The keyboard comprises two units, the keying unit and the replacment housing. The former has 64 black keys with a full-sized space bar. The new housing has been kept similar to the original QL housing so all peripherals remain compatible. No soldering is required and, the company claims it will take five minutes to fit.

More information on the £54.95 keyboard can be obtained from Schon on (04865) 3836.



● Saga Systems is to launch two QL keyboards next month. The more expensive of the two contains an infra-red unit so that you can unplug the keyboard from the computer and still enter commands. The other keyboard will be similar to Saga's Emperor range. David White, managing director of the company says somewhat competitively: "We haven't fixed a price but it will be less than the keyboard from Schon"

INFOGRAMES IN COMMAND

Infogrames, who brought you murder mystery Vera Cruz and is about to launch Inheritance, is yet another company launching a new label this month.

The label's called Command and it will be exclusively for strategy and wargamers, a hardly-done-by minority in the Sinclair software market.

The first release will be Apocalypse, a title from Red Shift, a company long-time Spectrum owners will remember.

It'll be launched in February at £9.95

TWTMTW
THAT WAS THE MONTH THAT WAS

What a year! Easily the most dramatic for Sinclair and the Spectrum since the machine's launch four years ago.

Who would have thought at the start of the year that Sinclair would be bought up lock, stock and barrel by its arch rival Amstrad? And who would have predicted a brand spanking new Spectrum would be in the high street shops this Christmas, built by Amstrad and ready to take the world by storm. Here's a blow by blow account of the most tumultuous year in Sinclair computing yet:

January. **Sinclair is seriously strapped for cash and the 128K Spectrum is still unlaunched.**

February. **Sinclair sells its flat-screen TV to Timex to raise cash to fund the 128K. The machine finally sees the light of day on February 13**

March. **Claims that the 128 would be 100 per cent compatible with existing software prove to be total tosh. Pandora – Sinclair's portable micro project is rumoured to be Spectrum compatible with discs**

April. **In a scene of high drama on April 7 Sir Clive announces he has sold world rights of Spectrum and QL technology to Amstrad. Amstrad gets Sinclair for a song – £5m plus £7m for stocks. Sugar announces a new Spectrum will be built, costing around the £140 mark. Sir Clive puts his luxury Chelsea home up for sale to anyone with £1m**

May. **Sir Clive reveals that, at the time of the sell-out, he was working on two new machines – one a game console the other a souped-up Spectrum with Amiga-like sound and graphics**

June. **Sir Clive gets interviewed and wishes Alan Sugar luck: "If he can make money then fantastic, but we were losing money and there's no sense in that."**

July. **A launch date is set for the new Amstrad Spectrum – the 128K+2 – of September 2**

August. **Sir Clive says he will still go ahead with Pandora, but minus its Spectrum compatibility**

September. **It's here! The best Spectrum ever – the 128K+2. The machine is everything we'd hoped for. It's really neat, with a full 128K and built-in cassette player – all for the incredible price of £149. The only niggle is its daft joystick configuration and the naff bundled software**

October. **Amstrad's profits soar – up 273%**

November. **The 128K+2 finally gets into the shops**

December. **The new Spectrum is set to sell well over 150,000 machines over the Christmas period. It's still the best selling machine by far and it's still got the finest selection of software available for any machine. Four years on and it's still the greatest. Beat that, Commodore!**

NEWS

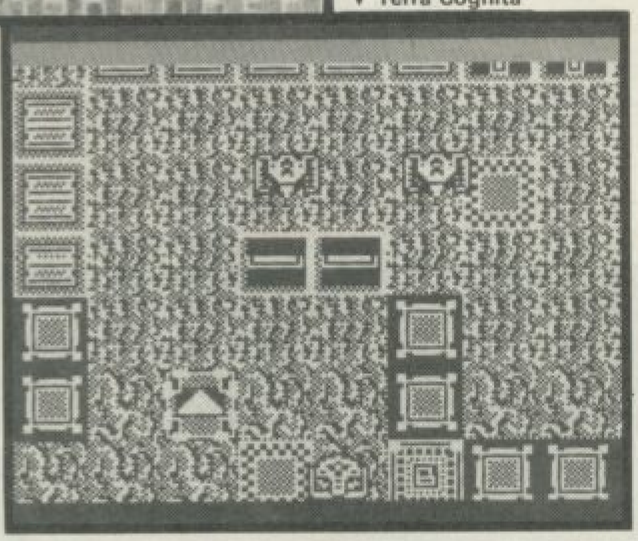
CHEAP DARLINGS

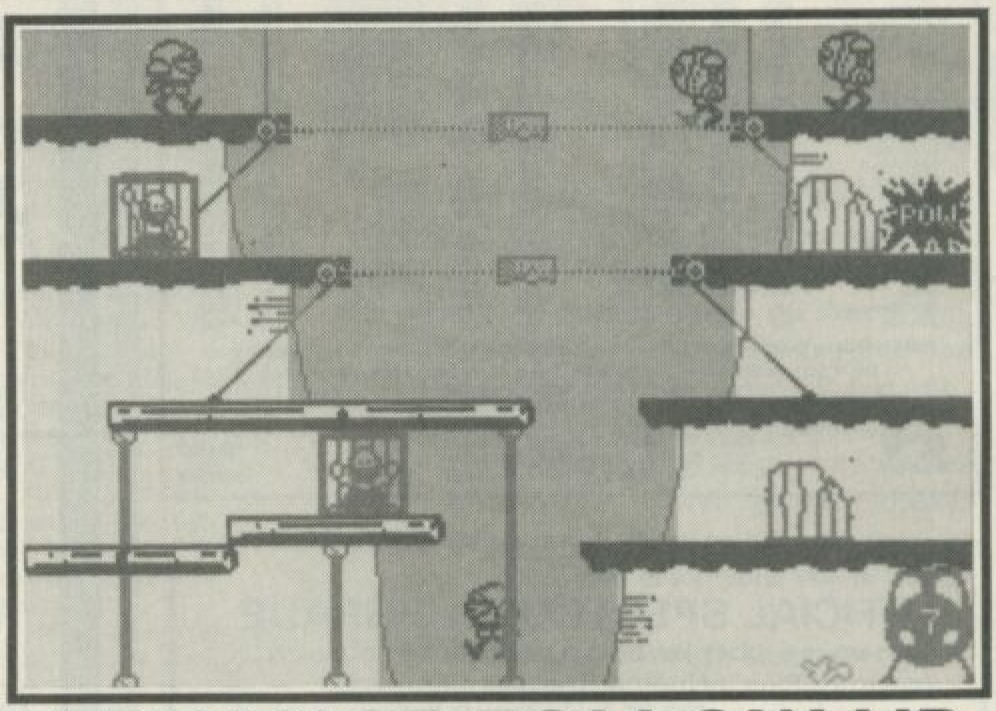


Code Masters, the new Darling of the budget software industry, has proved that there is life after Mastertronic.

Only two weeks after its launch the company ranked amongst the top seven UK software companies, grabbing 2·8 percent of the market with 12 titles across three formats. The company's two top programmers, David and Richard Darling, used to work for Mastertronic while their farther, Jim, acted as MD of AI Products, the company responsible for sourcing Mastertronics games

◄ **Code Masters**
▼ **Terra Cognita**





ADVANCE FOLLOW-UP BUTCH HARD GUY

Advance Software, still fresh from its success with **Hardball** will bring out something enigmatically called **Butch Hard Guy** this month.

The arcade game was programmed by Future Concepts who last year made a splash with the **Surf Champ** surfing simulation. It's a levels and ladders game in which you play a tubby commando who's mission is to rescue a group of prisoners who are in the hands of the evil Mr Foo.

Butch is for the 48K Spectrum and will cost £7.95

NET NETS £25,000

Micronet 800, the multi-user information database, has raised more than £25,000 for BBC TV's *Children in Need Appeal.*

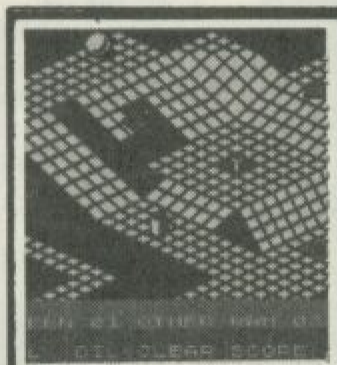
As Micronetters used their modems to pledge money, interviews with film and television stars were broadcast live from Shepherds Bush television studios over the net. The stars included Christopher Reeve, of *Superman* fame, Charles Dance who was at one time rumoured to be the new James Bond, and three regulars from *East Enders.*

A charity auction in which almost all the UK computer manufacturers took part netted £6,000 of the total money pledged. Chris Bourne, who compiles the micronet gossip column *Slasher,* was delighted with the news: "We had a great response.The only company who refused to contribute was Amstrad".

No doubt that great British institution Alan Sugar had other problems on his mind, see the 128K+2 compatibility story



◄ **Chris 'n' Charles**



ARTS IN THE UK

Electronic Arts, the massive stateside software house responsible for many of Ariolasoft's C64 and Amiga titles – including **Marble Madness** – is to launch its own British label and plans Spectrum versions of its new programs.

The company looks set to emulate Activision and UK newcomers Micro Prose and Konami, all US Films who have opened up over here. Electronic Arts is also looking for an MD to head its UK division. Current favourites include Hugh Rees Parnell, ex-supremo of Activision UK. Small world.

TWO NEW LABELS FROM VONSOFT

Vonsoft, a new game house based in Kent, launches two software labels this month.

Vonsoft itself will produce budget titles, to compete with Mastertronic and Code Masters, while its second label, Frozen Image, will release full price programs.

The first full price game is **Arena,** at a modest £4.99. It's a graphic adventure which has the hook of cash prize competition.

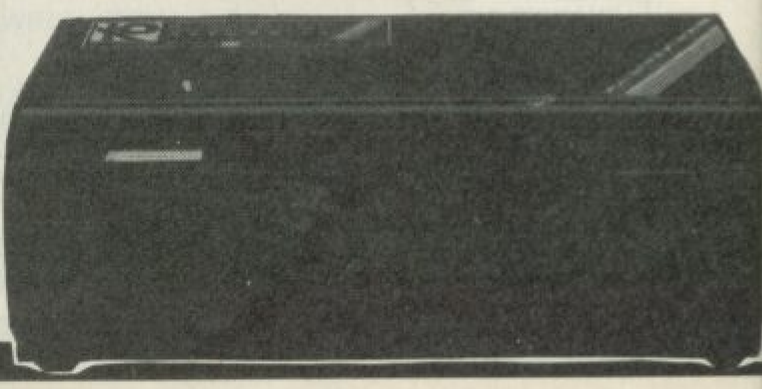
If **Arena** is successful Vonsoft will launch yet another label, Adventure Reknown, in February for adventure fans.

If they go on like this they'll have more labels than programs!

ROTRONICS BROKE

Rotronics, the manufacturer of the Wafadrive, has gone into liquidation. Despite a recent creditors meeting no one has come forward to buy the company. However, Rotronics hopes to fulfill existing orders with remaining stocks.

Anyone with an outstanding order should contact the official receiver, Leonard Curtis and Co, at 30 Eastbourne Terrace, London



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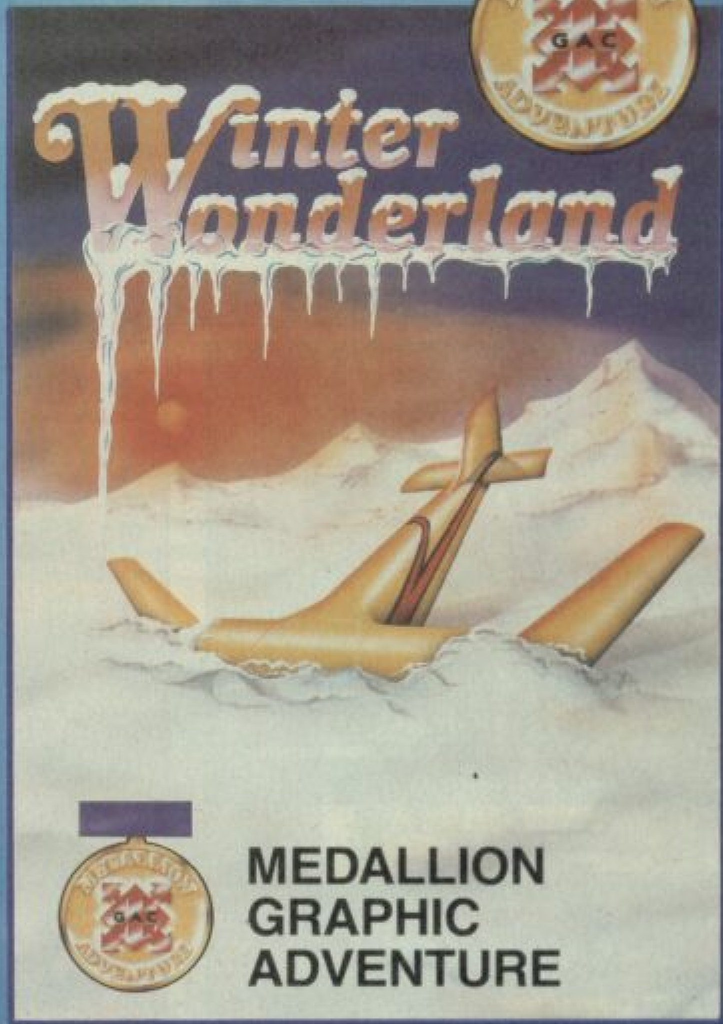
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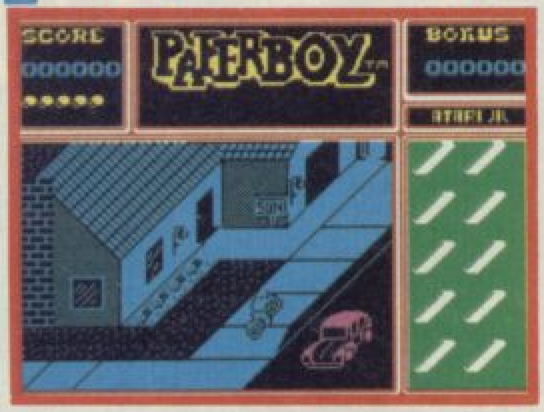
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SINCLAIR user

T★O★P T★W



▲ In the top slot: Paperboy Oct SU Tip for the top



▲ Tip for the Top: Space Harrier



▲ Longest on the Chart: Ninja Master

1	(1)	PAPERBOY	ELITE	£7.95
2	(5)	OLLI AND LISA	FIREBIRD	£1.99
3	*NEW!*	THE GREAT ESCAPE	OCEAN	£7.95
4	(3)	LIGHTFORCE	FASTER THAN LIGHT	£7.95
5	(7)	TRIVIAL PURSUIT	DOMARK	£14.95
6	*NEW!*	INFILTRATOR	US GOLD	£9.95
7	*NEW!*	URIDIUM	HEWSON	£8.95
8	*NEW!*	DANDY	ELECTRIC DREAMS	£7.99
9	(15)	NINJA MASTER	FIREBIRD	£1.99
10	*NEW!*	1942	ELITE	£7.95
11	(4)	KAI TEMPLE	FIREBIRD	£1.99
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20	(17)	BOMB SCARE	FIREBIRD	£1.99

HOTTEST CLIMBERS

★ ★ ★ ★ ★ ★ ★ ★

Hottest releases this month: Avenger from Gremlin may get viewed as a Gauntlet-alike, but it's a good deal better and more complex than that; **Fairlight II** is the follow-up to The Edge's earlier Bo Jangeborg



▲ Hot: Avenger



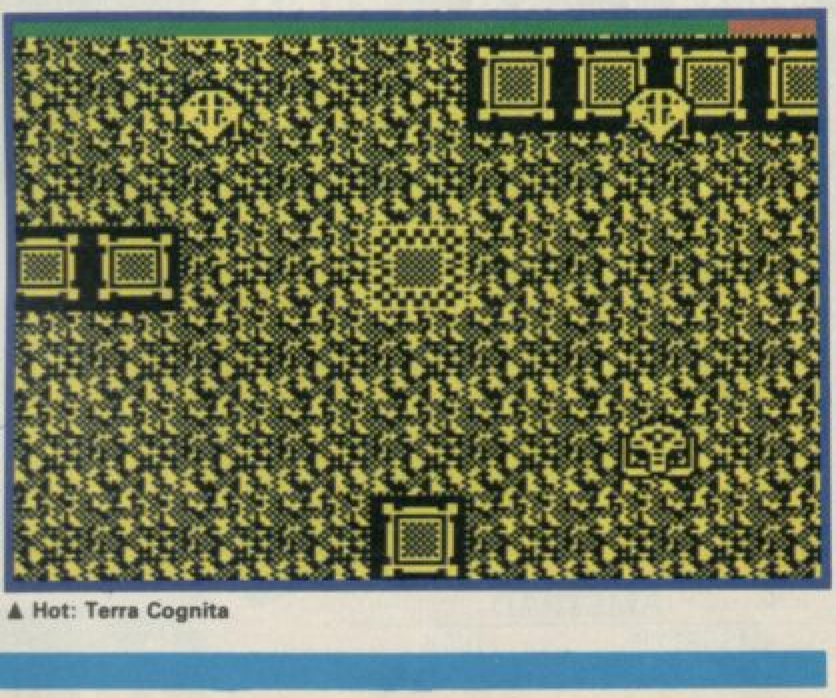
▲ Hot: Fairlight II

E ★ N ★ T ★ Y

Compiled by Gallup for *Sinclair User*

Excellent conversion. Inevitable hardware restrictions make the game less 'special', but it's still great	★★★★★
A graphically good but dull pot-boiler with cute characters. Predictable but well-executed	★★★★☆
The best thing Ocean's done for ages. Highly imaginative plot, gameplay and graphics. Don't miss it	★★★★★
The ultimate blaster. This one is mindless destruction at its very best. An essential purchase	★★★★★
It's THE yuppie board game conversion. Against all odds it's a terrific effort with sound and graphics questions added	★★★★★
A bit like being in an action film – not a brilliant one though. Arcade meets strategy meets adventure	★★★★★
Superb arcade game. Smoother, faster, slicker and more challenging than almost anything else you could buy	★★★★★
Astonishingly authentic conversion of what is effectively Gauntlet. The two-player option is an incredible game	★★★★★
Poor quality. Not the Exploding Fist type game it may seem. Avoid it if you can	★☆☆☆☆
A simple idea, simply programmed. But the gameplay is gripping. A taut aerial dog-fight drama for all Red Barons	★★★★★
A kick in the teeth for all martial arts fans. Flat graphics and flimsy plot. A let down even at budget level	★★☆☆☆
A must for all sports simulation fans. If you thrilled to Football Manager this is for you	★★★★★
Wally meets Skool Daze runny, jumpy, collecty thing. Cheap but has little originality	★★★☆☆
Latest in Beau Jolly's ten-packs of back catalogue. Pick up on the ones you missed for a pound a piece	★★★★☆
A big disappointment, having neither stunning graphics or exciting gameplay... And the multi-Loads are a pain	★★★☆☆
As original to play as it is to look at. One of the most imaginative games of the year	★★★★★
Could have been boring and tedious. Instead it's funny, exciting and impressive. A closet hit	★★★★★
Fine flight simulator. Not much detail to get in the way of blasting things at speed	★★★★★
Four-wheeled fun with accent on fantasy. Easy to start but difficult in higher levels	★★★★☆
Highway Encounter crossed with Knightlore. Excellent graphically and the dull plot is revived by the budget tag	★★★★★

classic – this one's more of the same with even more difficult puzzles; **Terra Cognita** is set to be the first hit from Code Masters, the new budget team which has just spun off from Mastertronic – it's a bit like Lightforce only a whole lot cheaper



▲ Hot: Terra Cognita

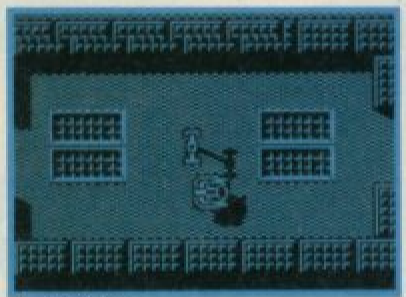
CHART ★ ★ ★ ★ BREAKDOWN

ARCADE

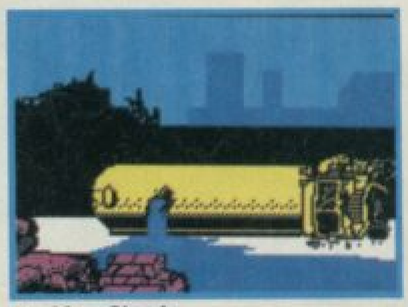
1	PAPERBOY	ELITE
2	THE GREAT ESCAPE	OCEAN
3	LIGHTFORCE	FASTER THAN LIGHT
4	INFILTRATOR	US GOLD
5	URIDIUM	HEWSON

ADVENTURE

1	VERA CRUZ	INFOGRAMES
2	JEWELS OF DARKNESS	RAINBIRD
3	AFTER SHOCK	INTERCEPTOR
4	PRICE OF MAGIK	LEVEL 9
5	HEAVY ON THE MAGIK	GARGOYLE



▲ Uridium



▲ After Shock



▲ Pub Games



▲ Graphic Adventure Creator

STRATEGY SIMULATION

1	TRIVIAL PURSUIT	DOMARK
2	HEAD COACH	ADDICTIVE
3	ACE	CASCADE
4	TT RACER	DIGITAL INTEGRATION
5	PUB GAMES	ALLIGATA

WORK-OUT TOOL-KIT

1	ART STUDIO	RAINBIRD
2	WHAM! THE MUSIC BOX	MELBOURNE HOUSE
3	THE WRITER	SOFTECHNICS
4	GRAPHIC ADVENTURE CREATOR	INCENTIVE
5	DATA GENIE	DATABASE

BUDGET

1	OLLIE AND LISSA	FIREBIRD
2	NINJA MASTER	FIREBIRD
3	KAI TEMPLE	FIREBIRD
4	HAPPIEST DAYS	FIREBIRD
5	180	MASTERTRONIC



DIGITAL INTEGRATION
ACTIVISION
HOME COMPUTER SOFTWARE
ocean
They sold a MILLION #3
FIGHTER PILOT
RAMBO
FIRST BLOOD PART II
The HIT SQUAD have put together FOUR No.1 Blockbusters for this NEW games compilation
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LETTERS



Well, it seems as if old Wriggles has done it again. I was not aware that address 562789 was accessible on my Spectrum 48K, but, according to *'Sap Chat'*, if it did exist, *Poking* it to zero would enable O'Donnel to get past the skulls in the second stage of **Pyracurse** without being changed into what looks like something which Fozbie could have done.

Needless to say, it does not work. When Jon has saved up enough luncheon vouchers, I suggest that he buys an old fashioned, flat keyboard, useful-as-a-door-wedge 48K Spectrum and actually types in every listing or *Poke* which he prints so that he can find out how the rest of us feel.

By the way, I think that SU has bottomed out with regards to quality with the timely departure of old incorruptible. The hour of liberty was marked by profanity in the *News* column and the mention of Fungus McNeill in every issue since which would suggest that the new editor is either mad or still cannot get out of the goblin's dungeon.

On the whole, though, I think that the quality of the mag has improved, despite the 'Highly Demented Communist Prats'.

The new articles are great, so all you've got to do now is get rid of the 'Greatbelly Clue Matrix Thing', the Mad Celt's red biro (see Issue 56 page 113 to find out why), Jon Wriggler and whoever makes all those spelling mistakes.

R W Miles
Dorset

● *Should we force this upon our readers? We don't know. How shall we deal with this lunatic? OK, thanks for your comments, they have been noted: the magazine has bottomed out but is improving every issue. What!?*

You PAW thing

I have been reading the December issue of SU (creep! creep!) and saw the preview for the **Professional Adventure Writing System**. Up till now I have been telling everyone I would like the Incentive **Graphic Adventure Creator** but now I don't know which one would be better.

I suppose I am mostly interested in the graphics capabilities but hopefully you have reviewed **PAW** and could advise me which of the two is a better 'all round' buy.

Jainta Woodbridge
Adventure freak
Surrey

● *Go for the PAW – it's much better, (according to John) although it's not available yet and it's certainly more fiddly to use on a 48K machine – it's really designed for the 128*

Dream machine

I believe Loki and Loki-like machines are destined to be the 'in' computers in the near future. The company which brings one out first is sure to be the trendsetter, and all the others would soon follow suit.

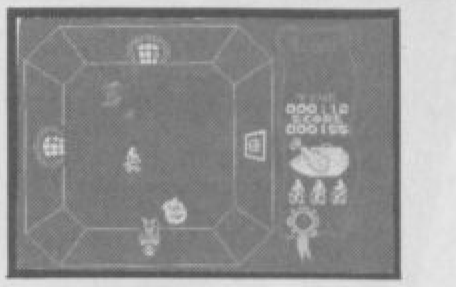
To keep the British home computer industry ticking, Amstrad and Sinclair Research should jointly produce the machine, otherwise, the Far Eastern tidal wave would obliterate them and make another black-watch debacle out of this industry. So please don't kill this dream computer, Mr Sugar 'n' Sir Clive.

Lastly, the mag SU's improving. The splash of colours makes it livelier and easier to read (good work Gareth!). Zap Chat is still boring, discontinue it and instead, every second month bring out a supplement with readable no-nonsense maps, hints and *Pokes*. Lately, programming-technique articles are missing? Reviews are OK! Graham Taylor is good and thank God, Ms Edgeley at last been edged out!!!

Tomal H Zaman
Karachi
Pakistan

PS Gremlin I love your sarcastic caustic & sizzling gossips.

● *Ms Edgeley is about to send those Rainbird boys around to set you straight. Gremlin said something witty but we couldn't work it out*



128K+2 compatibility?

Please could you tell me if old 48K games such as **Atic Atac** and **Jet Pac** will work on the new 128K Spectrum, because I am hoping to get one next year.

Philip Hendrick
Sheffiled

● *Most of them will work, but it's so hard to tell – they may only crash on one of the higher levels*

Learning into the curve

With reference to the letter from Carol James of Reading, published in the November issue of SU I can provide educational software for use at home or in schools, covering the age range of 4 to 8+ years.

I have three main series of programs, Maths, Language and Games. They are available on cassette, Microdrive or Opus disc.

A further three series, covering the same age range, and in the same formats, are made for use with the Starset Concept keyboard.

I can also prepare programs for use by handicapped children, and this can usually be done without extra charge.

Brian Seymour
25 Chatsworth Gardens
Scarborough
North Yorkshire

I have just seen your request for information on Educational programs printed in the November issue of SU and thought I might be able to help.

There are, in fact, a large number of excellent educational programs for the Spectrum but getting hold of them is not always easy. My wife (who is a primary teacher) and I have found the best venue is at ZX Micro Fairs.

If anyone would like a brief run-down of the program we have purchased and what value my wife puts on their educational value I will be happy to send one if you enclose an S.A.E.

John Manley
19 West Ley
Burnham-on-Crouch
Essex

LETTERS

Warsaw or Walsall?

I was looking through your comic one day when a leaflet fell at my feet. I picked it up and found it was for the all new SU (now with no artificial colourings and preservatives). I therefore bought the magazine (for the 51st time to be correct) and I liked what I saw except the new logo.

It took me 10 minutes to find as it looked exactly like the logos that the comics use: No 1, Smash Hits and other assorted toilet roll brands).

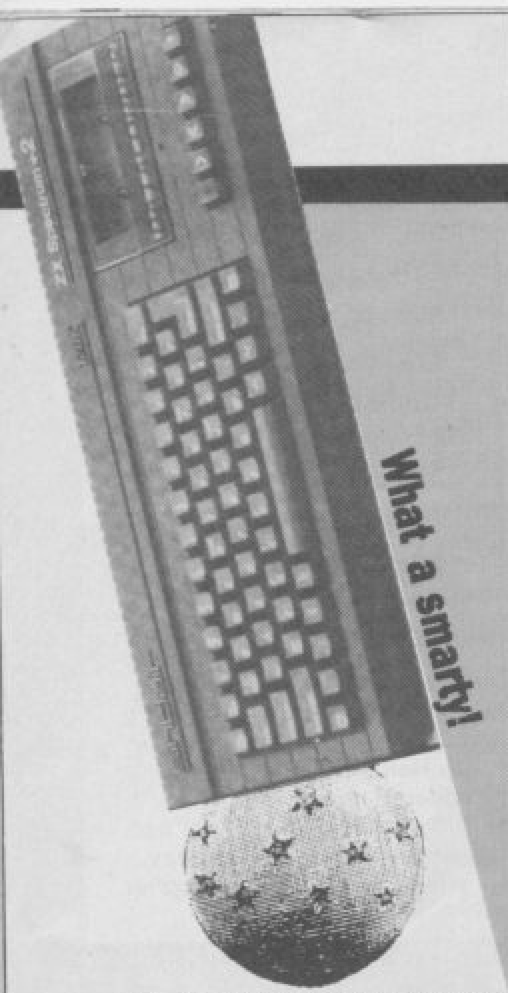
One bad thing, who the hell is this prat, Michael Wilson? He sounds suspiciously like a comic. I think you've mucked up his address again, as I think his first letter was full of ****. Are your sure it isn't Warsaw instead of Walsall??? His writing is of course bad, they don't let him use sharp instruments, only crayons in his funny farm. And I think James Baldock should be careful because Mick isn't after him with a Commode logo, it's a hammer and sickle and if James isn't cautious he could end up like Micky Gorbachev.

On the subject of James Baldock he seems to be quite an intelligent chap and a good letter writer as I have seen his pearls of wisdom all over SU.

But I'd better come clean, I've only written this letter because I didn't see the wave of comment on my first letter (September '86), probably because it was right beside Baldock's letter, just my luck! So I hope this little number is nice and controversial.

Adrian Walker
Cork

● *You are obviously completely insane*



What a smarty!

Why, oh why didn't Amstrad put a tape counter into the 128K+2. Having bought a 128K+2 a few days ago and being totally impressed with its capabilities, I was just a bit miffed not being able to find any of my self-penned programmes on C90's.

Opening it up I found ample room below the Spectrum logo for a miniature counter and the left-hand tape spool has a vacant drive wheel. So I fitted one in less than 2 hours from scratch, with no decrease in speed or performance.

This invalidates the guarantee but it's probably better to take it to the local specialist for quick cheap repair (in the event) than have it lost by some big chain store anyway

Bob Dennis
Cornwall

● *Who oh why are some people just so, erm, 'together'? You've obviously got the problem licked, Bob. Have any other readers done clever things with their 128K+2?*

Start here

I have just bought a Sinclair 128K+2 and would welcome your advice on the following.

I find that the manual assumes you understand computing terms and wondered if there is, or will be soon, a publication using laymen's language that will assist me to understand the workings of my computer.

It appears that most of the games require a joystick and that the 128K+2 is wired so that it will only take Sinclair joysticks. Could you recommend an interface (adapter?) and a joystick that will enable me to play the games available in shops.

If I purchase an interface will I be able to use any joystick with it?

Finally, is there any possibility that your magazine will be having articles aimed at the 128K+2 or at the beginner to computing?

L Brown
Manchester M16

● *Look out for next month's pull-out feature on beginning with the 128K+2. As far as joysticks go, your best bet is to buy a Kempston standard interface and plug it into the back of the computer. You should be able to make it work*

Pah! Some threat

I can't say I'm over the moon about the new mag, after all, there can't be that many films being turned into rip offs each week.

But down to the real point of the letter.

Who ever recommended Graham Taylor to the 'editorial committee' must own a Commodore. Firstly, he gives **TT Racer** (the best racing simulation ever) only four stars and complains of lack of realism in the graphics. Has he ever tried looking closely at the bikes as they bob, weave and lean over at the turns? Has he ever seen a racing game where if you step on the track and pull in to one side you can see the bikes racing on another part of the track? (Try it on Track 4)

Also, in his so-called joystick top eleven, he manages to give some joy-sticks 'Defensive Systems' like the Speed King, while others have 'Defensive Shields' like the Gunshot 2. Anyway why does he include the ageing, but tough and reliable, Quickshot I without including the Quickshot II (the Father of the Auto-Fire) and Quickshot II Turbo, its redesigned counterpart?



So, G.T. you have been warned, and I hope you enjoy the flood of letters I will unintentionally cause.

David Jenkins
London

PS Keep out Jon Riglar

● *G.T. replies: Dear me, such vitriol. Realistic graphics on **TT Racer**? It's in the eye of the beholder I guess but the fact that you can see them racing on another part of the track makes it a realistic simulation (which is what I said). It don't make the graphics great.*

As to joysticks that were and weren't included there was a concious attempt to include old and new sticks and a variety of types. There are plenty that might have gone in but couldn't. The Quickshot I did go in because zillions of people may well end up with one as part of special deals in Dixons etc etc and thus want to know about it.

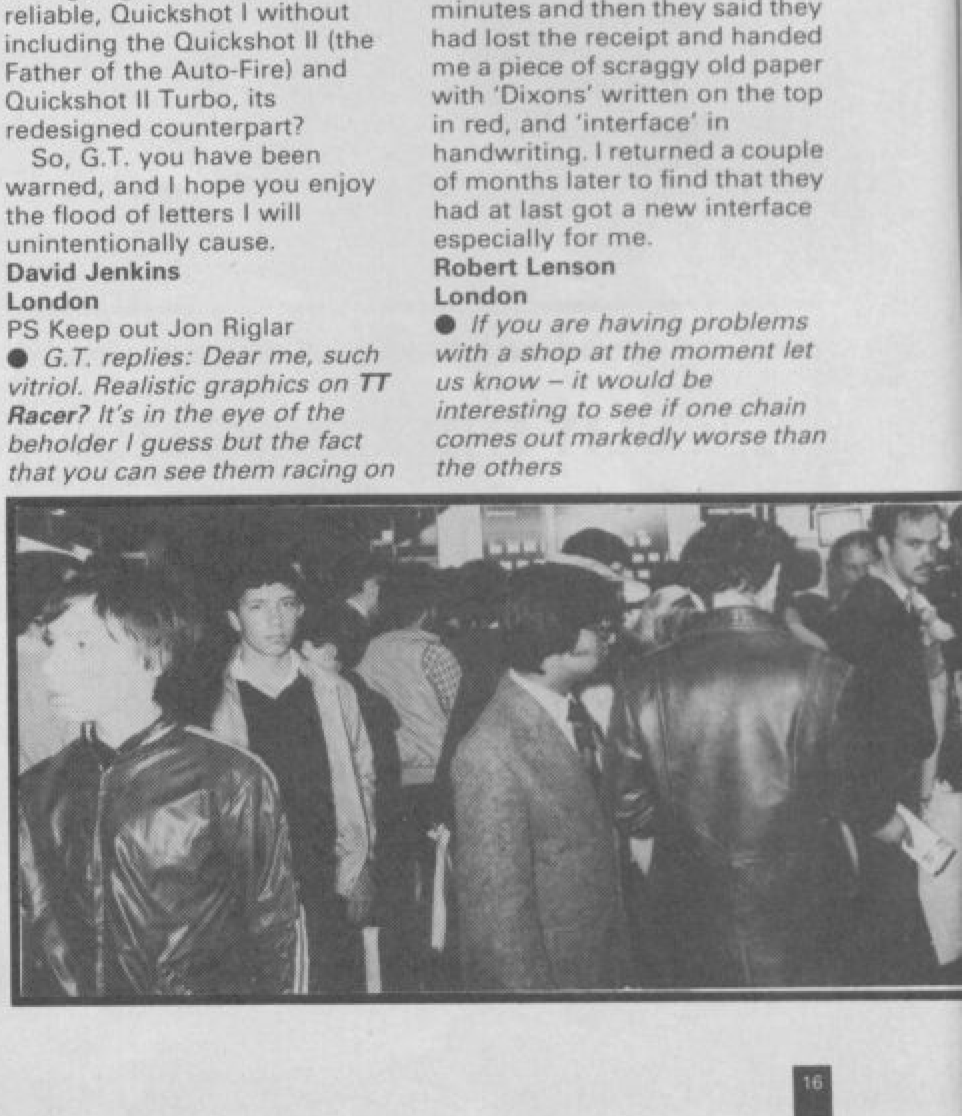
Thanks for the warning, David.

I've been shopped

I would like to make a complaint about Dixons as I think they give the worst service out of all the shops . . . When my interface broke down I took it to Dixons to be replaced and when I got there they didn't even know what it was. When I explained they made me wait half an hour and made me got home without the new interface. A week later I returned and it still hadn't arrived. They said it would be there in about a month and when I returned in a month they still hadn't got it. And so I asked the assistant if I could see the manager. He said that the manager was on holiday and would be back in a week. I went back there a week later and as usual I handed them the receipt. They made me wait twenty minutes and then they said they had lost the receipt and handed me a piece of scraggy old paper with 'Dixons' written on the top in red, and 'interface' in handwriting. I returned a couple of months later to find that they had at last got a new interface especially for me.

Robert Lenson
London

● *If you are having problems with a shop at the moment let us know – it would be interesting to see if one chain comes out markedly worse than the others*



C•O•D•E T•A•L•K

ANITA Sinclair, is female and a programmer. This is a very unusual thing. Her fame(ish) is almost totally to do with a) having the surname as a well-known industry figure and b) having introduced the world to The Pawn, **a mega adventure running on at least 500 different computers (Really? Ed. No not really). It has just been converted to the 128K. We asked Anita about western civilisation. Here's the dirt.**

ANITA SINCLAIR AGE 24

"The first computer I saw was probably a Nascom at my friend's house. I was 17 and I wasn't thrilled. I learnt to progam using books mostly things like Adam Osbourne's *An Introduction to Micro Computing* and the Radio Shack manual. I just fiddled about beginning with something like *For* A=1 to 100, *Print* "hello". Later on I probably remembered to put a *Next* at the end.

The thing I wrote which I am proud of was Grin Wars an arcade game for the QL. I wasn't pleased with it at the time, but now I think it's pretty good.

VITAL DETAILS

Which other programmer(s) do you admire?
I don't tend to know names but I like Realtime – Starglider is an incredible achievement – Ram Jam, Gargoyle and Infocom
What is your favourite program?
Well it might be an assembler or something but as a game I guess it would be Castle Wolfenstein
What arcade game do you get the highest scores on?
Rearguard, it's an Apple II game
What program would you most like to have written?
The Spectrum version of Starglider
Your single greatest programming achievement?
The graphics compression on the Atari ST version of The Pawn
Favourite TV program
Fawlty Towers
Favourite Movie
Up in Smoke, The Blues Brothers or Life of Brian.
Favourite Record
Mahler's First Symphony
Favourite Book
Alice in Wonderland
Worst subject at School
History
Worst program that was a hit?
Ghostbusters
Hobbies
I strip floors, read books and drive
Favourite thing about the Spectrum?
It was good for its time in quite a lot of ways (that's an answer?)
Worst thing about the Spectrum
You can't page off the Rom



SOFTOGRAPHY:
GRIM WARS (1984)
THE PAWN (1986)

LAW OF THE GUN

Jim Douglas checks out two of the new-style pistol grip joysticks and chooses the top gun

The Phasor One isn't particularly cool. It sits around looking pretty dull and generally old.

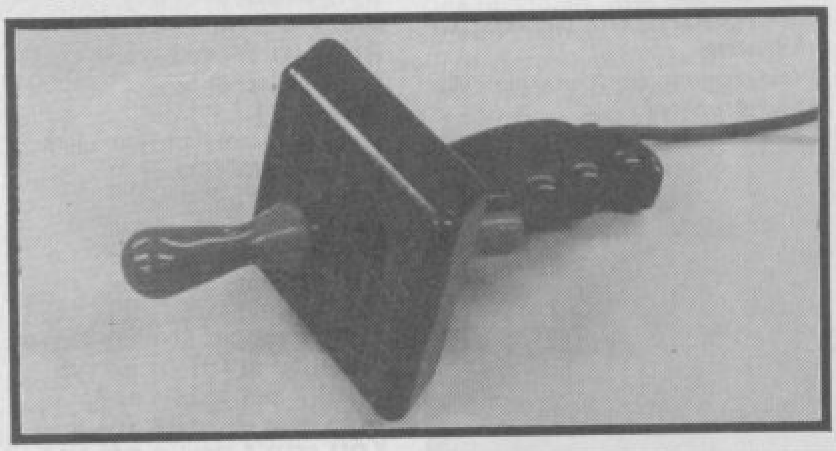
In fact, it's quite a natty little number. The plastic is robust, and the fire button is in a really convenient place.

It feels, somehow, just right and the balance is good.

The only problem is that the stick on top sometimes gets stuck pointing in a strange direction, causing you to meet a horrible death during a potential world-beating attempt at Billy and The Springy Things.

Phasor One loses major cool points owning to the completely ghastly logo on the stick. Apart from that, it's pretty sound.

Phasor One is available through Britannia Software and costs £12.95■



Looks: 8/10 ***(Nice, but naff logo)***
Strength: 9/10 ***(Very tough. Maybe the stick would weaken?)***
Feel: 8/10 ***(Loses one point for being a tad too small, and another for having a dodgy shaft)***
Value: 8/10
Overall: 9/10

The Magnum, from Mastertronic is a designer joystick if ever there was one.

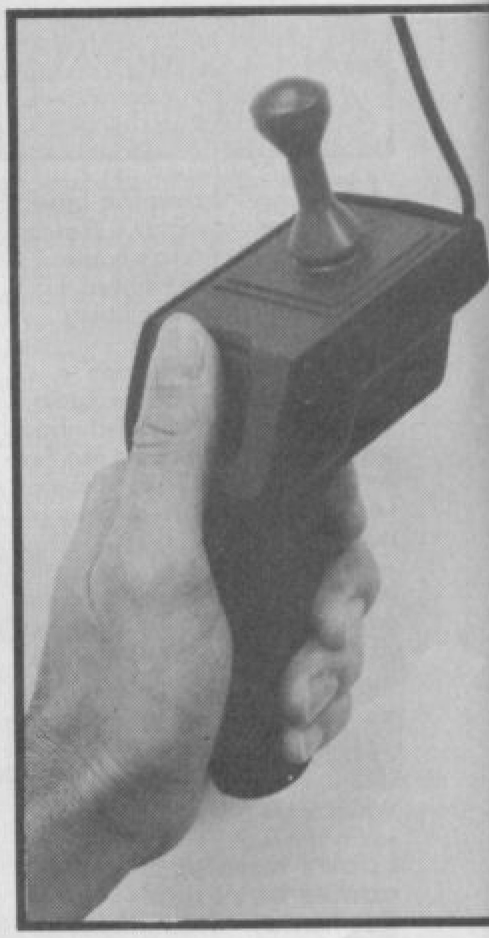
A black body, blue top and red shaft and fire button make it probably the least unpleasant looking joystick around.

Literally, magnum means 'big'. A fairly apt description. This is the most bulky joystick we've seen recently. Its fire-button is located towards the back and on a slopey bit and is designed to be thumb-driven.

The shaft can be located at the very top of the blue platform, and makes a very satisfying "click".

The main problem with the Magnum is that you'd expect to be able to slam away at it with gay abandon. The trouble is the grip is so big that you can't get a strong enough grip to be able to exert any force.

Magnum costs £12.50■



Looks: 9.5/10 ***(Great, but not quite perfect)***
Strength: 7/10 ***(Looks mega-strong, but isn't really)***
Feel: 8/10 ***(Feels a bit plasticky, but is also quite nicely weighted)***
Value: 8/10
Overall: 7/10

write stuff...

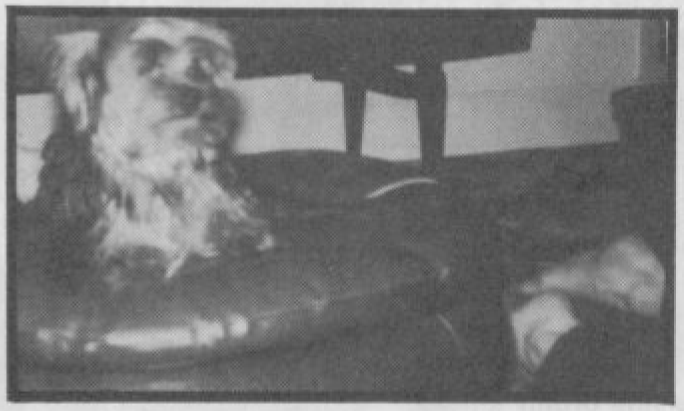
IF you reckon we're talking rubbish don't just stand there . . .
Tell us what your think.
Stick your comments on paper, fill in and cut out the coupon below and send it in . . .
And if you don't send us your picture – the sillier the better – we'll have to print a picture of a slug

Pippo Mastertronic

Why didn't you ever review this gem from Mastertronic? It's great. Pippo is really Q-Bert in another guise. Nevertheless it is very addictive and the pseudo-3D graphics are excellent. The introductory graphics are brilliant, although somebody should point out that not everyone has five-letter names■



Darren Walshe
Basildon
Essex
Game choice: 1942



Pub Games Alligata

How can you give Pub Games a 4-star rating? Graham Taylor must have had about thirteen pints before reviewing this. It's the most useless piece of software around.

There is only one decent bit – the darts – and that isn't a patch on Mastertronic's 180 which is more exciting and quite funny too.

The rest of Pub Games is trash and seems to have been written hundreds of years ago.

As you can gather, I hated the game and for people who are thinking of buying it, save your money as you'll get cheezed off straight away■

Richard Beattie
Barrow-in-Furness
Game choice: Space Harrier

Virgin Atlantic Challange Virgin

Virgin Atlantic Challenger is made by your review in October's SU to look boring and unplayable.

It's nothing of the sort. I found dodging the icebergs and fishing boats mega-brill.

Making dear little Richard Branson eat, drink and repair various parts of the ship was great. And as for your quote it should be a budget game, that's a load of cobblers. At £7.95 the game's a steal■



Matty Everett
S Yorks
Game choice Super Soccer

The Great Escape Ocean

I agree with you totally, Ocean's The Great Escape which my friend's got is wonderful. It's just like the film and the plot is short and simple which gives the game a feeling of class. Graphics are brill and there are no colour clashes. Some of the ideas in the game are incredibly original: who would think of using medals for a scoreboard and a flag to show your strength?

Recently Ocean has got itself a bad name with some poor games but after The Great Escape I knew I shouldn't have doubted them■

Matt Tomlin
Battle,
Sussex
Game choice: The Great Escape



Dan Dare Virgin

You were right Dan Dare – it's BRILL!

It has the best backgrounds of any game I have ever seen. So much colour which refuses even to quiver when Dan screams past in his lush green uniform. Dan is brilliantly animated, too. Go out and get it■

Graham Quinn
Durham
Game choice: Space Harrier



Knight Rider Ocean

For once I agree entirely with one of your reviews. After waiting a year for the game I expected a lot better. It's shocking. The graphics are appalling on the driving screen and the scrolling is useless.



The plot is very unoriginal – stop WWIII getting started. How many times have we heard that before?

Detail on the dashboard isn't what I'd call good and, given the time Ocean spent developing the game, it should have been better. Whatever you do don't buy it■

James Baldock
Waterbeach
Game choice: Avenger

Strike Force Cobra Piranha

Mixed views for Strike Force Cobra. Be prepared for a challenge, though. And it certainly isn't as good as you said it was.

Strike Force Cobra requires much thought and fast reactions. Choose an elite force of four Cobra's from a choice of eight. Each Cobra has different abilities and you've got to choose the correct team. After this you must begin your attack. Here's the catch. The time you have before you fail the mission is limited.



You must rescue all of the scientists in order to get the code to destroy the main computer. The labryinth is on four levels with well over 250 screens to overcome. Some rooms have robots or human guards and some even have guns firing bombs.

Overall, though, I found the game quite annoying although the graphics are first class. The use of colour is good but the sound can make the atmosphere very annoying■

Matthew Phillips
Herts
Game choice: Aliens

Every so often — well very often actually — you write to tell us that we know nothing about anything and insist that some program we trashed is actually the best game ever. Conversely you blast us for saying something is great that you absolutely loath and detest.

Enough is enough. We can't take any more, if you think you're so clever you write the damn magazine. We mean it!

Every month we'll devote a page to a selection of your opinons on the latest software. Don't get mad write the review you think the game should have received and we (subject only to space) will print it.

Now, aside from seeing your work in print we will send you a crisp £10—er, cheque — with which to buy the software title of your choice — tell us what you plan to spend the money on if your review is printed.

One request, we want to know what you look like so send us a picture. Any old picture will do — you at home, in Ibiza, in the garden, even making silly faces in photobooths we don't care.

So get cracking — write your reviews and send them together with the completed coupon below.

YOUR REVIEWS
Maximum 150 words. No swearing, libel or illegibility and come out of the corner fithing. Don't beat around the bush — tell us straight what you think. Send your review (or any *recent* game) plus your picture and fill in the coupon. *send the lot to The Write Stuff, Sinclair User, 30-32 Farringdon Lane, London EC1R 3AU.

Name..

Address..

....

The program I would most like to buy with my tenner is ....

* Reviews supplied without full name and address will not be considered for publication.

SINCLAIR user

COMPETITION WINNERS

Spot the Editor Compo!

Life, eh, readers? What's it all about? Just when you think that you have tailored your image to suit the career of your choice, lots of people write to a well known magazine and destroy your illusions.

David Thing (who?), Editor of this fine organ found himself in a similar position when judging the Spot the Editor competion. Finding the results completely unbelievable, he made all sorts of charts and diagrams, trying to warp the statistics, BUT THE FIGURES DO NOT LIE!!

- 35% of the entrants decided ThE mAD CelT (A) was the editor.
- 34% Chose the be-suited Graham (F) as their ideal Ed
- 22% Thought John (C) looked the sort of crazy guy to edit SU
- A paltry 6.5% guessed correctly that the guy in the horns was David, The Ed. (E)
- 1.5% Plumped for Clare (D) (who's not even on the mag any more)
- 1% Voted for Louise (in the Bowler) (B) and finally. . .
- Linda and Alison, (G) and (H) 'failed to score.'

The winners – who collect image-building Design Design T-shirts – are: S Rawson from Barnsley, Richard Payne from Middlesborough, T Rowlands from Suffolk, Ian Andrews of Eastleigh, Paul Dais of Briston, Khalid Sohail from Saudi-Arabia, Marcus East from London, Nicholas Patrick from Oxfordshire, Nick Bartlett from Cornwall, Sheldon Smith of Lowestoft and Neil Williamson of Wakefield. Well done!



The people's champion . . .



. . . And looking very dodgy



The whole rabble

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SU3

MUSIC

NOTE PERFECT? SU wonders how many elephants you can get in Cheetah's new MIDI

Cheetah busted a few price barriers with the SpecDrum and marginally missed the boat with its sampler (because of the Ram Music Machine).

Now here's the MK5 music keyboard which puts them right back on top of the price-busting music technology ladder.

A point to stress, the keyboard has been developed for Boots and if this review inspires you it's there that you should run, Cheetah itself doesn't sell them.

Why is the MK5 one of the best value electro-musical tools ever? On its own it does nothing except wink a few lights and sit there stupidly. It has no sound creation facility whatsoever. You can press its keys as much as you like but it won't make a single noise (other than a vague click).

In that sense it isn't for absolute beginners – you need to couple it with something else first. Either a 128K or 128K+2 Spectrum and Cheetah's own Midi interface.

This useful little device used the Midi *Out* socket on the back of the keyboard to connect to your 128K Spectrum. You load some driving software and *voilá* – you can play three-channel sound using the Spectrum sound chip on the MK5.

The software also allows you to edit your own sounds but mostly they are going to sound like bleep, blop, nahp beeeeeeeep. Nevertheless, being able to play the sounds on a full (five-octave) keyboard is a revelation.

Even better is the Pitch Bend wheel – you can connect this device up to the Spectrum and, gasp, bend them weeowwwwwwww (become a sincere Jan Hammer/Stevie Wonder type Jazz musician and do great solos).

The Midi Interface has some other nice features: mixing tones and noise and dividing two sounds over two halves of the keyboard.

It could have more features than it does – sequencing, screen composing and so on – but that's really to criticise it for what it isn't and Cheetah is promising to produce all those sorts of music composing tools as add-on software for the system.

Using the MK5 with a Spectrum and Midi is really only the thin end of the wedge as far as what it can do is concerned. As a five-octave Midi compatible keyboard with large keys it's ideal for being connected to other synthesisers and computers.

For £99.95 (that's a hundred quid in real money) it's just about the cheapest 'slave' keyboard around. You could, for example, hook it up to a wonderful Casio CZ101 synthesiser which has very small keys to get a powerful synthesiser with big keys and five octaves.

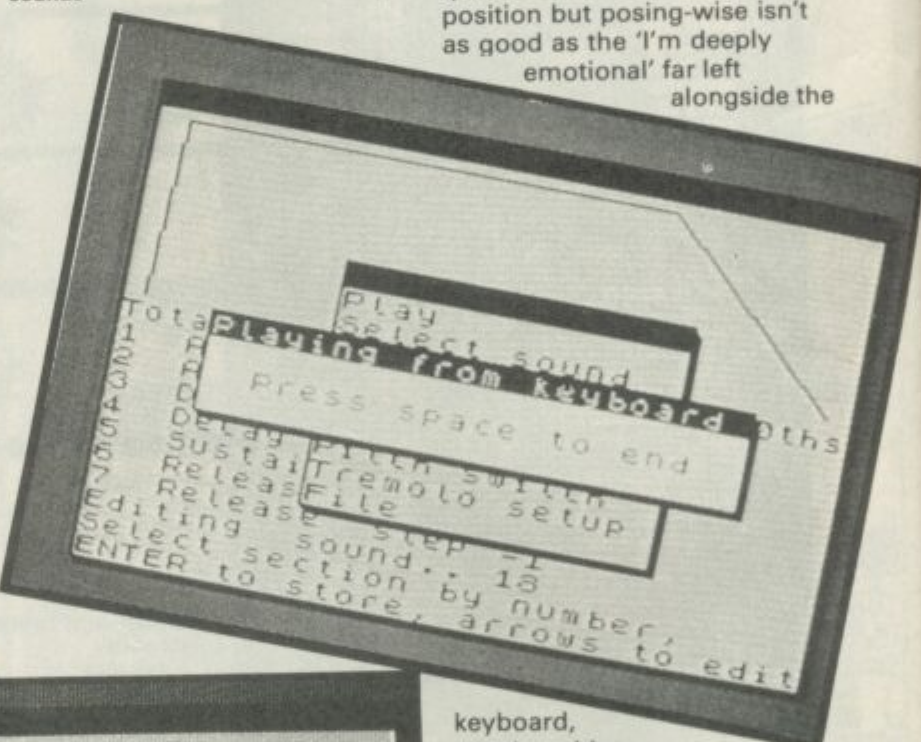
The keyboard also has a program function. This enables you to change the octave range and to send instructions to other music instruments. For example you can, from the MK5 keyboard, send messages to your Casio CZ101 to change the current sound selected. Having this sort of Midi-based control from a dummy keyboard is a sophisticated feature usually associated with keyboards costing £400 or more.

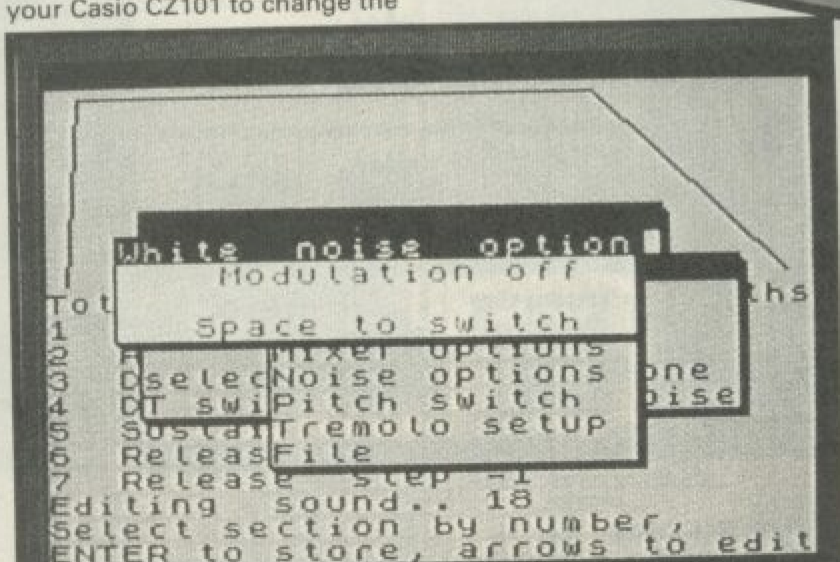
Ultimately you could end up with a system consisting of the MK5, Casio CZ101, Spectrum, Cheetah Midi Interface or Ram Music Machine and maybe some Cheetah driving system software like an on-screen composing program.

Fairly basic software ● But straight-forward to use ● Put the MK5 with Ram's Music Machine and maybe a CZ101 and you're talking serious sounds ▼

In fact, Ram Music Machine, MK5 and Spectrum would give you a sampling keyboard, with some music editing facilities as well as a drum machine. That's serious musical power.

The keyboard itself? It's nicely made of plastic and metal, with a playing action about as good as you'd expect below £500. The Pitch Wheel is located oddly at the back of the keyboard, around one octave up. In fact this proves to be quite a sensible playing position but posing-wise isn't as good as the 'I'm deeply emotional' far left alongside the keyboard, usual position.





The program select feature is economically done, where a single button moves into programming mode and the top few keys then act as switches. A large LED shows the current state of Midi channels or program locations. There are 128 programs which is enough for most Midi keyboards.

In short it's a very appealing package. If you are just getting into mixing computers and synthesisers then the MK5 and Midi Interface is a good first step (especially with a Ram Music Machine). A winner■



SHAO-LIN'S ROAD

ARCADE REVIEW

Shao-lin's Road despite being a popular arcade game is not necessarily a cash-raking micro title. There are so many kicky-kicky games around that The Edge has definately taken a risk in trying it one more time.

Fortunately for The Edge, **Shao-lin's Road** is a good conersion of the original game. Maybe even a *very* good conversion. The virtues of the game are precisely those lacking in most of the other, recent, releases – ie big sprites with lots of detail. Careful use of areas of two-colour also avoids much by way of attribute clash.

Actually playing the game reveals that actually **Shao-lin's Road** may look like some kind of multi-level **Exploding Fist** but it really isn't. There is essentially only one martial arts attack move here – kicking. Although there is a wild rather slavic leap, your man can perform it only as a defensive move.

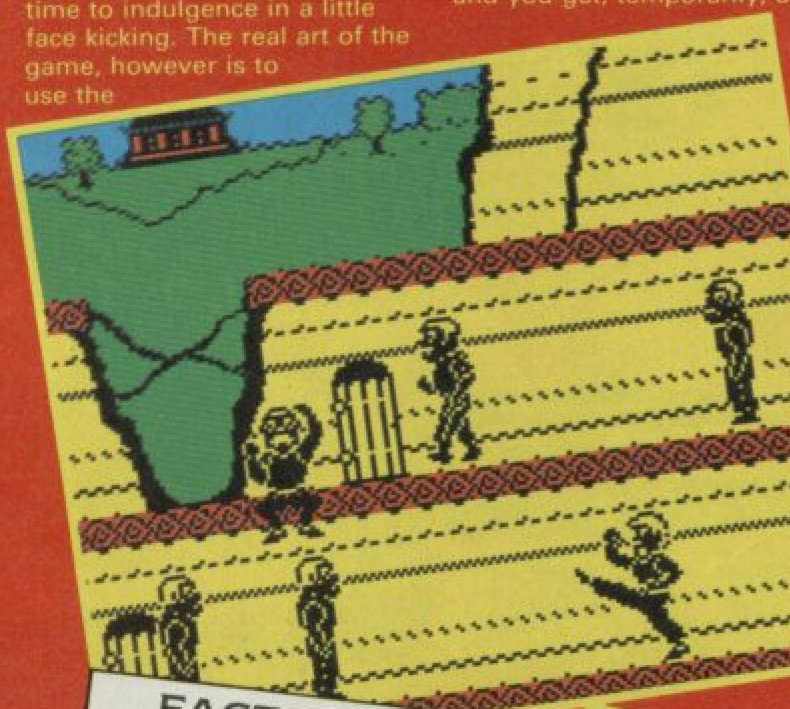
Shao-lin's Road is far more about dodging around, keeping out of the way, and kicking the occasional object or person when the time is right. The reasons it's fun to play are really only the usual arcade ones: knowing when to run away and leap out of it, knowing when to attack, when to go for the bonuses. You won't have to spend ages staring at a chart of joystick moves in this game!

Each level consists of a team of enemy warriors most of whom can be dispensed with fairly easily and one leader who usually takes more than one kick and also follows you about. The screen is presented in three layers – you can jump between them but the warriors seem to use the lift. When they are getting out of the lift is a good time to indulgence in a little face kicking. The real art of the game, however is to use the bonuses – objects which fly across the screen for extra points. One looks like a bomb, the other appears to be a deadly pizza (probably Hot Chilli, I imagine). Better is the sparkly thing that appears. Grab this and you get, temporarily, a magic weapon of some sort. This could be a kind of magic mace which swings around and around or a sort of giant ball you can launch and knock down a whole roll of enemy warriors like ninepins (with a Spectrum blip for every one it's fairly amusing and earns big points).

Level Three is an oriental house on three levels. It looks fine except for the fact that because of the highly coloured house the various characters have had to be done in a contrasting colour which makes them seem exceedingly strange – a bit like looking at the negative of a photograph. Maybe it's just me but I found it very distracting.

Mostly I enjoyed **Shao-lin's Road** a lot. I got a definite attack of the just-one-more-goes and despite all the other martial arts games I'd recommend it.

I don't think it's a major release but I do think it'll be very, very successful. A highly professional conversion ■





FACTS BOX

A fine conversion. Should do well even though the martial arts thing has been covered pretty well by now

☆	SHAO-LIN'S ROAD
★	Label: The Edge
★	Author: in-house Price: £7.95
★	Memory: 48K/128K Joystick: various
★	Reviewer: Graham Taylor

SOFTWARE STAR RATINGS

All software reviews carry a star rating, the basis of which is value for money programming, graphics, speed, speech and sound presentation and addictiveness

★★★★★ **Solid gold. Buy it**

★★★★☆ **Well worth the folding stuff**

★★★☆☆ **Pretty average**

★★☆☆☆ **Very poor. Probably over-priced too**

★☆☆☆☆ **A total rip-off. Complain loudly**

ARCADE REVIEW · TOOL-KIT REVIEW · WORK-OUT REVIEW · STRATEGY SIMULATION REVIEW · ADVENTURE REVIEW

Each review carries an icon which shows the type of software.

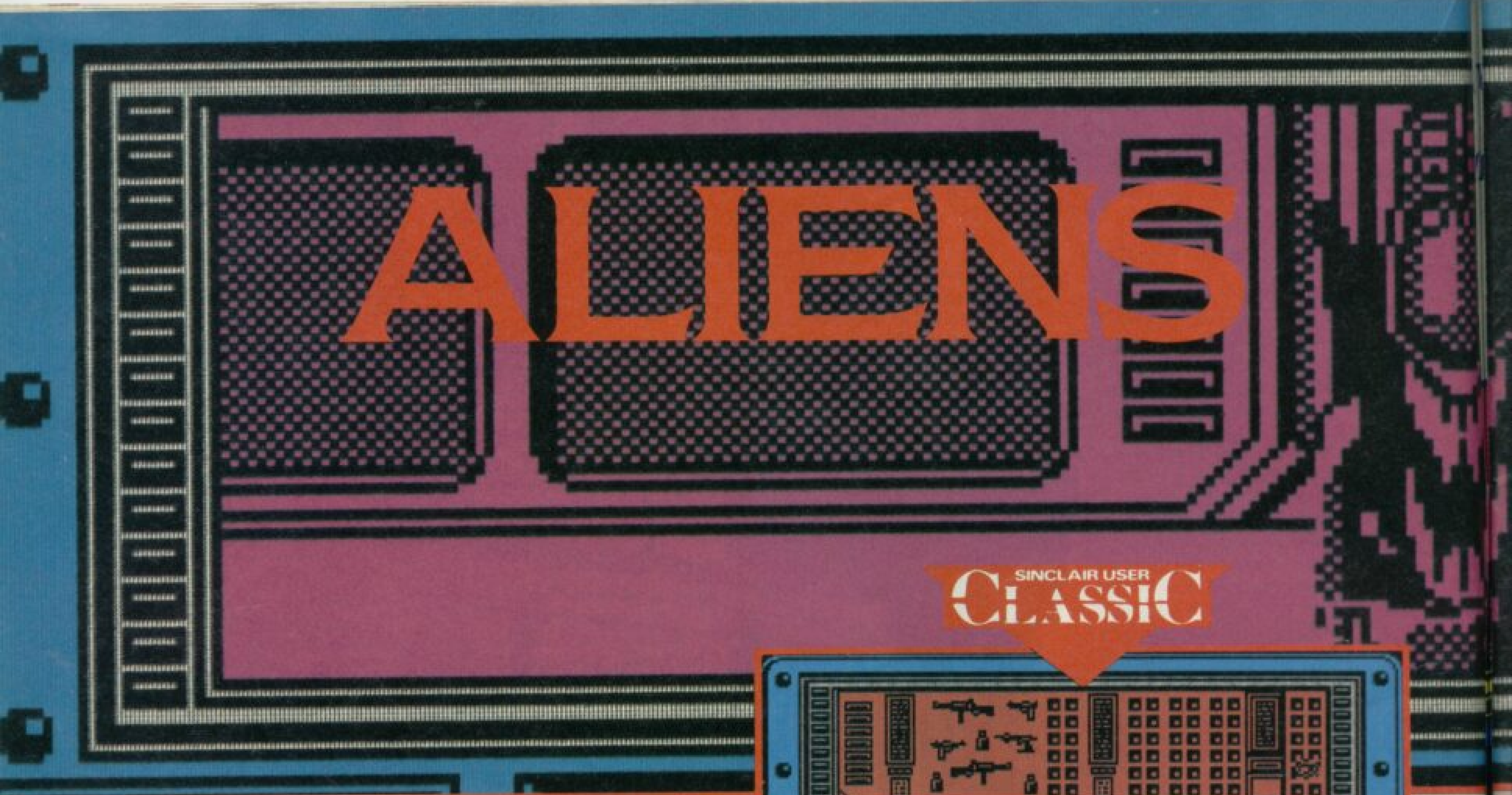
Arcade is for animated games, which in general, reduce the life span of your joysticks.

Toolkit covers programming utilities which improve the quality of home-made software or packages which make machine code easier to write.

Work Out, software which can be used in the home, such as car maintenance or home finance.

Strategy and Simulation are games where thought, planning and judgement are the principle skills required.

Adventure includes either graphic or text adventures.



ALIENS

SINCLAIR USER CLASSIC



Five marines, the ex-Flight Officer of a doomed space freighter, and a little girl called Newt are trapped in the colony base of a lonely, distant, planet. And all the colonists are dead, gutted by the face-hugging parasites which use human bodies as disposable wombs.

This is *Aliens* the movie and now **Aliens** the game.

The base comprises a massive 248 rooms and corridors, you've got no idea where you are, and only six very vulnerable characters to control – Riply, the Flight Officer, heads the cast and Lieutenant Gorman commands the marine team of Hicks, Burke, Vasquez, and the Android Bishop.

You control the whole thing from a console which shows the strengths of all the characters' their firepower and heart rate and the view through one of the video cameras worn on the helmets of each character. So you get kind of player's eye point-of-view of the base – and you can switch between your characters looking, as it were through their eyes.

So there you are with your team standing at the entrance to the base. Wait long enough and the aliens will come for *you* rather than the other way around. Better do something.

Choose one of the characters to move – you can only control one at a time. Push the joystick forward to go forward, left or right to turn. And the character's eye-view scrolls accordingly.

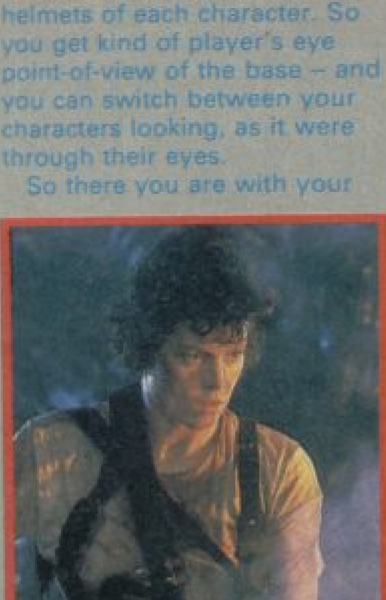
At first the base seems incredibly complex and it's difficult to work out where you're going let along how to find your way back.

And just when you think you're going really well you hear the warning alarm sound. There's an alien in the room with you! As the creature comes closer the warning pitch rises and you begin to fear. Where is it? – you can't find it. You whirl round but suddenly the screen blanks out in a flurry of static and you've lost one of your team. Without even getting a glimpse of the creature or a chance of a shot. This is more difficult than I'd expected.

It wasn't long before I'd wiped out my whole team! My second attempt was better though.

The gameplay is unusual – you may think it's odd but I thought it was very effective. Basically you can play the game how you want. It is a strategy game. Or is it an arcade shoot 'em up.

It's up to you. You can zap around trying to knock off as many aliens as you can – periods of relative boredom punctuated by short bouts of nerve jangling frenzy. Shoot the aliens and zap the bio-material they create from the walls of the base as you go.



Or you can map and plan your strategy. Keep your team together and try to reach the Queen alien's chamber and destroy her.

When you switch between characters, using a key letter, the display changes with a quick sparkle of interference. All of your team have a gun so things aren't as tough as they might have been. The big problem is lining up your sights on the alien before it gets you. When it all happens it all happens very fast.

You use the smart guns for destroying aliens, face huggers, generative gooey-stuff, and any of your buddies who have been impregnated.

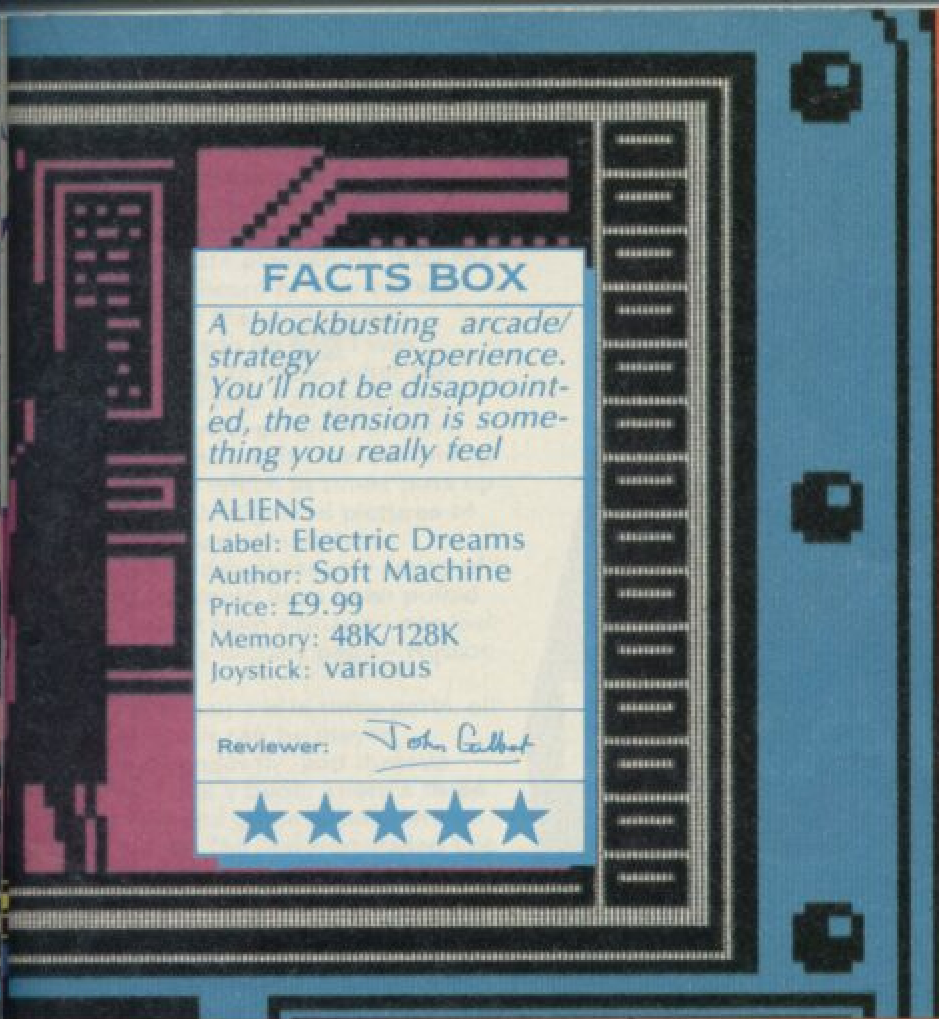
There are two ways in which you move around the base. Obviously by joystick. Find a door and press the Spectrum's space bar to get into the next room. Some doors are locked and you'll have to blast through them to continue.

Rooms are made up of several screens. You don't have to scan them all unless there's an alien in the vicinity. When the warning sounds scan the room with the joystick and when you catch up with its shuffling, hump-backed, body aim at it's head and fire. One shot to the head will finish it but if you hit only the body you'll need three blasts.

If you aren't quick enough the claxon builds to a scream, the alien turns and it's two pairs of jaws open to bite deep into foam, plastic, flesh and bone. I defy any player to get used to what are some of the most realistic graphic effects I've ever seen on the Spectrum.

HINTS AND TIPS

- **Make a map. Hardly a revelation, but until you map it out you won't be able to move your team automatically**
- **Doors may be locked for a purpose. Blow the wrong door and you could be chomped**
- **Avoid alien blood. If it blocks doorways don't go through them or you could boil like the acid it contains**
- **The alien catacomb structures on the walls are used to store human bodies. Destroy them and gain points**
- **Don't go out alone. You never know what's lurking in the next room. Move your forces as a team and stick together**
- **Don't try to leave the base. You won't survive more than three seconds on the planet's surface**



FACTS BOX

A blockbusting arcade/strategy experience. You'll not be disappointed, the tension is something you really feel

ALIENS
Label: Electric Dreams
Author: Soft Machine
Price: £9.99
Memory: 48K/128K
Joystick: various

Reviewer: John Gilbert

★★★★★

You'll see even better graphics if you wait until the creature turns and gets close before firing. Its head explodes in a cloud of large, black, fragments.

You can only move one room at a time using a joystick but there is another method, by which, you can move through six or seven locations at a time. When you've mapped the game fairly thoroughly you can type in the number of locations you want to move and the direction in which you want to walk. For instance 2E would take the viewpoint character two locations East without having to worry about which door in the current room leads where.

Aliens don't always kill. One of your team could be captured and prepared for impregnation. If that happens his – or her – strength bar turns yellow and you should send another team member to save that character. If the bar reaches the right side of the status window the impregnation is complete the character should be killed before the baby alien leaps from the stomach.

All this killing depletes laser power so the first destination for all the marines should be the armoury. The walls of this room are laden with guns and bombs but you don't have to pick them up. Any character who enters the room will get an increased ammo status.

Once you've been to the armoury you can visit some of the other incidental rooms. There's the Generator Room which you must keep free of growths or the base's power will fail and the Control room which you must also rid of growths or the lighting will fail. After you've visited all these rooms you can progress through the maze towards the queen's chamber where face huggers go into action and the whole alien operation is controlled. Once you've entered the chamber you must activate the bases's biomech device to cause the aliens to decompose. Unlike the film there is more than one alien queen and you'll have little time to activate the device with face huggers, alien warriors and queens loping and lurching after you.

Survival is difficult – to say the least – in **Aliens**. The best plan, though not always successful, is to move the whole group from one location to another. One character should scout ahead and if there's trouble you can destroy the troublemaker easily. I've lost a few like that, but I have also managed to explore most of the base.

Electric Dream's latest baby may be a licensing deal but there's no stigma attached to this one. It's a game of realistic graphics, limited arcade action and sophisticated strategy. The simple storyline makes for software magic■



ARCADE REVIEW

DEFCOM

Star Wars, America's wholly unsound Strategic Defence Initiative, is the subject of Quicksilva's new game.

No danger of pussy-footing around the subject here, I can tell you. Everything goes wrong right from the beginning. Instead of the commies being behind an evil plot, however, it's the oldest standby of the lot – the mysterious alien horde.

While the satellites go about their entirely peaceful business (yet they're choc-full of really big lasers), a huge green-headed boggly-eyed fungus monster creeps up on them and points the damned things toward various important places on Earth, and starts destroying cities.

Taking control of a space-ship, you fly over the Earth's surface, darting back and forth in order to save cities from destruction.

The screen is presented in rather impressive 3D, showing the world's rotation beneath you, and all the horrible little beasty aliens zooming around. The aliens look a bit like throat lozenges with water-wings, but they're quite impressive, all the same.

FACTS BOX

Defcom is a moderately addictive shoot-out with a tiny bit of strategy thrown in for good measure. Great music

DEFCOM
Label: Quicksilva
Price: £7.95
Joystick: various
Memory: 48K/128K

Reviewer: Jim Douglas

★★★☆☆



Your space-craft is viewed from behind, and moves around in a rather uncomfortable arc, a-shootin' and a-firin' for all it's worth.

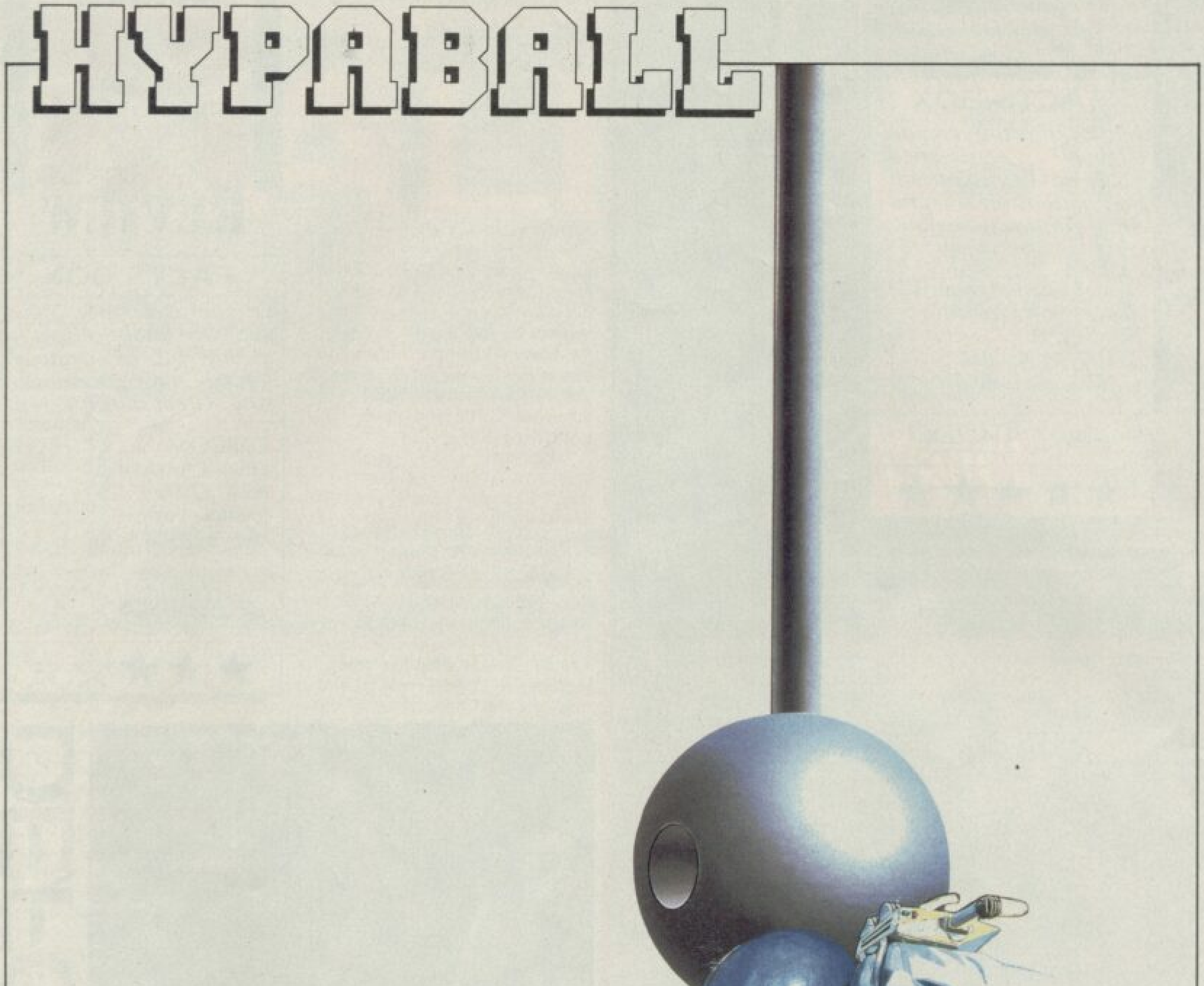
And the music – like that on Quicksilva's other recent release, **Glider Rider** – is very good indeed. Very, um, 'spacey'.

Now, things would get purrrretty ruddy hairy if you had to dart over the planet without some form of assistance. Thankfully, a mappy thing can be dragged on to the screen indicating the locations of yourself, and the satellites.

When the message 'Gor! Luvva duck. Tokyo is having a bit of gip.' (or something) pops up, you can flick to the map, and work your way to Tokyo. The only problem is that, as it takes such an astounding amount of time to reach your destination, the aliens will have already moved on.

Defcom is 'classic' shoot-out with a few inventive touches and a completely wasted 'political' novelty angle. The 3D is nice but too superficial, though, to maintain one's interest■

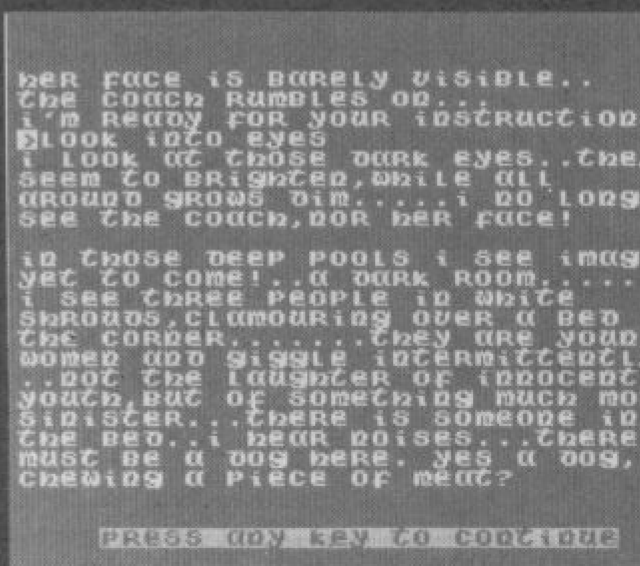



HYPABALL

ADVENTURE REVIEW

DRACULA







CRL's Dracula is a masses-of-hard-to-read text adventure with some graphics, which owes its reputation largely to the 15 Certificate plonked on it by the British Board of Film censors.

Being the only horror officianado on SU I was intrigued to know what the censors found so appalling. I was, however, soon to learn that the 15 suits the content of a game which at times puts up goulishly digitised pictures of death and atmospheric descriptive passage – some of which could have been pulled straight from a Shaun – see last month's fantasy page – Hutson book.

The game is in three parts, all of which can be played independently, and it reads very like a book. There's three complete game *Loads* here so it's big. The first part, called The First Night, takes place at the Transylvanian inn where Jonathan Harker spent his last night before his trip to Count Dracula's castle. It's designed as a gentle introduction to new adventurers and as a scene setter for more advanced players. All you need to do is pay the coachman, sign the inn's register, pick up your keys and have dinner to regain your strength. After that it's up to your room for some sleep. Do go up to bed. There's a nifty dream sequence with gore plenty for horror fans. Make sure that you close the window or the nightmarish visitation which you see as a dream image will chase you into reality and kill you.

If you die in Part 1 you're treated to one of the digitised death pictures, in this case a cowled skull, neatly illustrated in red and blue.

The Arrival, the second part, is a different story altogether. You'll find it fiendishly difficult to escape from the coach which takes you most of the way to Castle Dracula. A very strange and shady lady occupies the carriage with you and, if you stare at her long enough she'll give you some indication of the future – particularly of three ladies who are very long in the teeth. If you're lucky you'll escape from the Castle with only your sanity out of gear, get back home to England and be able to prepare for Part 3: The Hunt.

I managed to solve The First Night in 20 minutes, which did not bode well for the rest of the game. The language parser takes only the first few words of each command into account, so you can't string several commands together as it'll only obey the first one. In some cases, however, the language is necessarily dense. For instance, when you type *Look* you'll get the reply 'I see nothing of consequence'. You've got to specify the object of your desires and in some cases – particularly in Parts 2 and 3.

So far you've mainly taken the role of Johnathan Harker, who's devil's own task is to deliver the deeds of Carrfax Hall into the hands of the Count. He moves into the Hall, near Whitby in Yorkshire, and you take on the guise of John Seward, physician and diary keeper. He's a resident of the village in which Dracula stalks at night.

Some places are off limits in this part of the game, until you progress beyond a certain point. For instance, when you leave your house the directions to Carfax Hall are given but, when you try to go there, the program says 'I don't want to do that at this time'.

You'll also have to revisit some locations more than once to pick up objects which you didn't know were there unless you took advantage of the unhelpful *Look* command to see in all the nooks and crannies. For instance, you can visit the village store but can't buy an all important newspaper – unless you've picked up the money at an earlier point.

Despite those admittedly nit-picking criticisms and reservations Dracula is great fun. Some sequences may disturb Mary Whitehouse but I can't see anyone else being affected. There's nothing in the game which is utterly grotesque and there are no stomach-lurching scenes ■

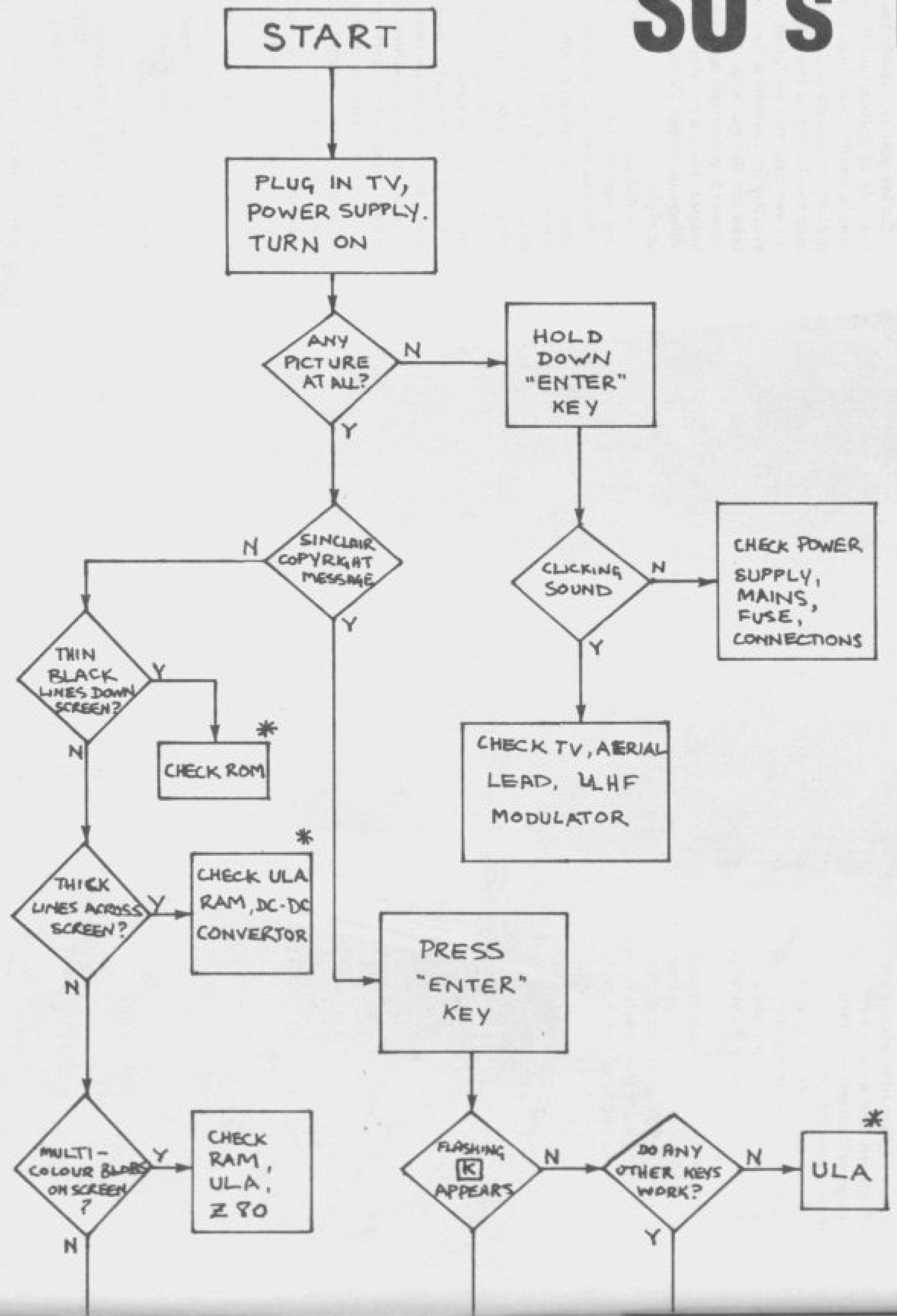
FACTS BOX

The gothic character set and digitised pictures just make you want to die. Great ghoulish fun in three full Loads

★★★★★

DRACULA
Label: CRL
Price: £9.95
Author: Rod Pike
Memory: 48K/128K
Reviewer: John Gilbert

SU's Fault Fixing Chart



The worst has happened. Your Spectrum absolutely refuses to load another game or take another line of Basic. It's gone on strike. So what can you do? Take it back to the repair shop? Maybe. There's always the chance that it's something you can fix yourself, and that saves money, time and hassle. What you need is the SU **Fault Fixing Chart.** Even if – shudder – you can't mend your Spectrum without help, at least you'll know what to tell the repair man. More time saved. Who says we don't look after you?

Before you start. . .

Most faults just happen, with no apparent cause. But some are the result of an accident or other mishap, and these can be much easier to explain. For example, did a joystick port or other add-on get added-on with the Spectrum turned on? Plugging anything into the edge connector on the back of a Spectrum with volts connected is bad news, and means a trip to the repair man for sure. If the problem's intermittent, like the picture going fuzzy sometimes or the computer occasionaly resetting for no very good reason, then likely as not it's a cable fault. See if the mains plug is connected properly, similarly check the TV lead. If the problem only occurs with a certain add-on, or a certain tape, then it's probably not the computer. But it could be! If the add-on or whatever seems OK, then follow the chart by pretending that the problem happened all the time.

Problems can also occur with too many add-ons on at once, or having your Spectrum plugged in near to a freezer or noisy thermostat. Moving your computer usually cures it

How to use the chart

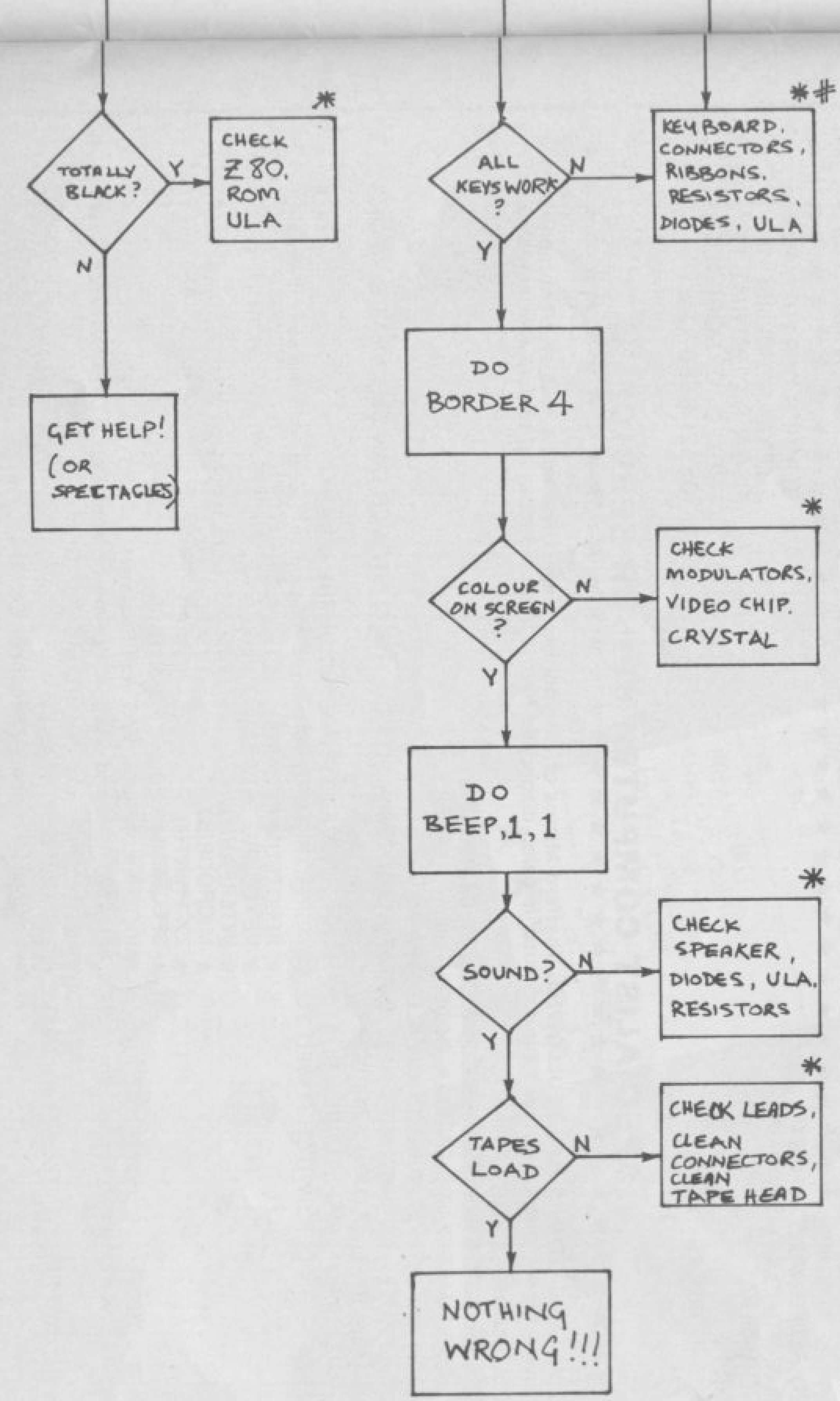
It's simple, really. Certainly not as complicated as the map for **Fairlight.** Start at the top, and follow the line downwards. Do any instructions that you find. If you don't know much about the Spectrum and how to use it, then make sure that you've followed the setting-up bit in your manual. Then use the chart. Ask yourself the questions in the diamond-shaped boxes. If the answer's **YES,** then follow the appropriate line. Similarly, don't be afraid to take **NO** for an answer. If your symptoms don't seem to match those described on the chart, then follow the closest equivalent. Eventually, you'll come to a box with a *CHECK. . .* instruction in it. Those with a * by them will need expert help, as there's not much a lone Spectrum owner can do against failed components. Consult our list of repair shops

101 Spectrums. . .

The chart is for 16K and 48K Spectrums, and Spectrums+s only. If you've got a Spectrum 128 or 128+2, then the circuitry is different. However, apart from the sound which comes at you from the TV, you can pretend that you've got a Spectrum+, and follow the tests accordingly. You've even got a little extra help – reset the computer and hold down the *Break* key, and you get a test pattern to tune in the TV with

Press on

Where it says check the keyboard connections. This you can do yourself, but be warned that it ruins your guarantee. To do this, remove all the screws from the base of your Spectrum. The top half will lift off, revealing the circuit board, and two white ribbons leading to the keyboard. Don't pull at these when removing the top half – just hold the case open without putting them under any stress. These are the things to check. Firstly, make sure they haven't got any creases or tears in them. If they have, then the keyboard membrane (the bit beneath the keys themselves) will have to be replaced. A shop repair job, I'm afraid. But if they look OK, then make sure that the ends are firmly plugged into the sockets on the circuit board. Do this by holding each ribbon in turn firmly between thumb and first finger, just above the connector, and pressing down towards the board (the connectors are strips of black plastic with small metal fingers inside). If nothing seems to make any difference, then it's probably not the keyboard at fault



Repair directory

EAST ANGLIA

R E Electronics, 133 London Road South, Lowestoft, Suffolk. Tel: 0502/66289
Thetford Micros, Unit 4, Leyland Close, Fison Industrial Estate, Thetford, Norfolk. Tel: 0842/65897
Gaztek Computers, 4 Shelfhanger Road, Diss, Norfolk, IP22 3EH. Tel: 0379/52327
One Step Beyond, 11a Castle Meadow, Norwich NR1 3DE. Tel: 0603/663796
M P Electronics, Freepost, Dereham, Norfolk, NR19 2BR

SOUTH WEST WALES

Technicom Services (South West), Unit 5, Transom House, Victoria Street, Bristol, BS1 6AH. Tel: 093484/3460
Capital Computer Services, Unit K2, Cardiff Workshops, Lewis Road, East Moors, Cardiff, CF1 5EG. Tel: 0222/461801
I T Western Electronics, Unit G2, Avonside Enterprise Park, Newbroughton Road, Melksham, Wilts. Tel: 0225/705017
North Devon Micro Centre, Lyton House, Castle Street, Barnstable, North Devon. Tel: 0271/44260
Screen Scene, 144 St. George's Road, Cheltenham, Gloucester. GL50 3E2. Tel: 0242/528979

NORTH WEST

H S Computer Services, Unit 2, The Orchard, Warton, Preston, Lancs. Tel: 0772/6323686
Microtrix, 24 Great Moor Street, Bolton, BL1 1NP. Tel: 0204/398176
Mancomp, Unit 5, Levenshulme Trading Estate, Printworks Lane, Manchester, M19 3JP. Tel: 061/224 1888

NORTH EAST

Micro Power, Northwood House, North Street, Leeds, LS7 2AA Tel: 0532/458800
Micro-World Computers, 25 Hill Top Road, Slaithwaite, Huddersfield, HD7 5ES. Tel: 0484/846117

EAST MIDLANDS

Micro-Mend, Main Street, Farcet, Peterborough, PE7 3DB. Tel: 0733/241718
MCE Services, 33 Albert Street, Mansfield, Notts. Tel: 0623/31202
Video Vault, 140 High Street West, Glossop, Derbyshire, SL13 8HJ Tel: 0454/66555
Dimension Computers, 27-29 High Street, Leicester, LE1 4FP. Tel: 0533/57479
Spectrum Hospital, Centralised Services, Picadilly, Bulwell, Nottingham, NG6 9FN

SCOTLAND

Bits 'n' Bytes, Block 14, Holden Way, Donisbristle Industrial Estate, by Dunfermline, Fyfe, Scotland, K11 5JW. Tel: 0383/515255
Speak/Easy Computers, 141 Mary Street, Motherwell, Strathclyde, ML1 1JP Tel: 0698/53609
Micro Serv, 95 Deerdykes View, Westfield Industrial Area, Cumbernauld, G68 9HN. Tel: 02367/37110

WEST MIDLANDS

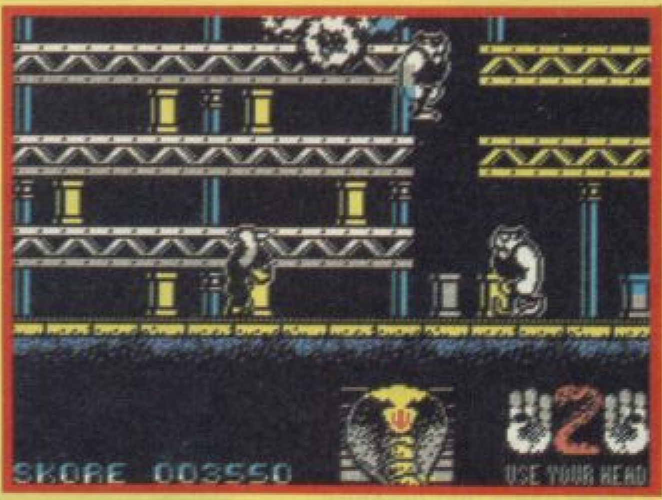
Quantum, 33 City Arcade, Coventry, Warwickshire, CB1 3HX. Tel: 0203/24632
Bull Ring Computers, 1 Waterloo Terrace, Bridgnorth, WV16 4EG. Tel: 07462/66839
Micro City, 1a Queen's Road, Nuneaton. Tel: 0203/382049
Thomas Walker and Son, 37-41 Bissle Street, Birmingham, B5 7HR. Tel: 021/6224475
Specialist Computer Repair Centre, Dept 18, Unit 4, MEB Works, Windsor Road, Enfield, Reddich, B97 6DJ. Tel: 0527/65671

LONDON/SOUTH EAST

Nobles Computer Repairs, 14-17 Eastern Esplanade, Southend-on-Sea, Essex. Tel: 0702/63377
Suredate Computer Services, 45 Wychwood Avenue, Edgware, Middx. Tel: 01/951 0124
Prompt Electronics, Unit 4, 15 Springfield Road, Harrow, Middx. HA1 1QF. Tel: 01/863 7166

ARCADE ★ **REVIEW**

COBRA





Finally! At last! Eventually! It's finished! The game for every would-be vigilante and boys called Marion. **Cobra** lumbers on to the software scene – a heavyweight in every sense of the word.

Just in case you were fortunate to avoid the whirlwind of media hype surrounding the film, I'll give you a low down on the plot. Crime has got a bit out of hand in America, and the cops just can't cope. Tied down by laws that let criminals go free, the boys-in-blue have their hands tied.

Roll on Marion (Sly Stallone), a big lad with a tight T-shirt. He'll right the wrongs, catch the crooks, help the innocent and positively rake in the box-office takings.

In the movie, Stallone wasted absolute hordes of bad-guys, spraying his machine gun all over the place in a bid to make the streets a safe place to walk. In the game, you sprint along walkways, avoiding death which appears in a number of ways.

Amongst the foes that you encounter are large men with knives, flying missiles and women armed with rocket-launchers. There are also some very mysterious pram things which whizz back and forth across the screen. I guess that they are a mere hindrance, and something not to be blown away, as each time one hits Marion, his arms wave about a bit, and he looks distressed.

Initially, your first line of defence is your head. Running around the walkways of the city, Marion will butt anything in sight when you hit the fire button. The only problem is managing to get within butting range before the target looses off one of their weapons. If you're too slow, you will end up running directly into a missile.

There are three sections in the game: city scene, rural area and factory. In order to get more impressive and effective weapons, you must collect beefburgers. Obvious, isn't it?

Your ultimate aim – apart from being able to claim having killed an absurd number of misfits and social dropouts – is to rescue the top "fashion model" Ingrid Knutsen from the arch-villan The Night Slasher (boo!).

Although involving a lot of running around and shooting things, the program would be better pretending to be a straightforward shoot-out instead of a movie. The screen scrolls around, and the movement is quite smooth. Some of the instructions are quite ridiculous – "If you try to kill Ingrid she may wander away". The music is OK though, and fits the 'style' of game very well■

FACTS BOX

Cobra is just what we all expected. Not great, it's pleasant enough, and not as disastrous as most licence deals

COBRA
Label: Ocean
Price: £7.95
Joystick: various
Memory: 48K/128K

Reviewer: Jim Douglas

★★★☆☆

BREAKTHRU

Breakthru is based on yet-another-ruddy-arcade-machine which, in turn, appears to have been based on **Spy Hunter**. Not wholly original, I grant you, but it's still a damned good chase through all sorts of terrain.

The idea of the game is that the most revolutionary fighter, the PK430, has crashed behind enemy lines (doesn't sound particularly revolutionary so far, crashing and all). Anyway, your objective is to drive through all manner of enemy defences in order to reach the plane. Then, well, I'm not sure, as I didn't come particularly close to this stage.

The graphics are pretty nice, scrolling from right to left quite smoothly. The screen is presented side-on, and an attempt at depth doesn't fall as flat as you may expect, as it's possible to move into the screen by pushing up on the joystick.

There seem to be few problems colour-wise, only becoming noticably bad when leaping over enormous piles of rocks, causing your car to go a rather horrid red.

Obstacles present themselves in a variety of ways. There are little rocks (I think they are



rocks) which do no end of damage to your car, men with flame throwers, helicopters, tanks and jeeps. All of these are very dangerous indeed, and will finish you off with amazing ease.

A slightly more disconcerting fact is that the roads along which you drive will sometimes come to a complete halt. Either there is a huge hole plonked right in the middle, or you come across an apallingly large pile of boulders. Your only option is to hit the space bar and fling your super-mobile into the air. This part is a bit ridiculous, but is the only way out of such desperate problems.

You control your car by moving the joystick left and right, for decelerate and accelerate respectively, up and down for in and out of the screen, fire for fire, and space for jump.

The game comes in four stages, each depicted on a map, over-viewing the whole game.

As you progress, things become more and more difficult. Holes in the road crop up with more frequency, little men armed to the teeth will fire on you more rapidly, and you generally have a tougher time of everything.

It can get pretty hectic, and the only real snag is the fact that you have to use the keyboard to leap into the air. Otherwise it's great■

FACTS BOX

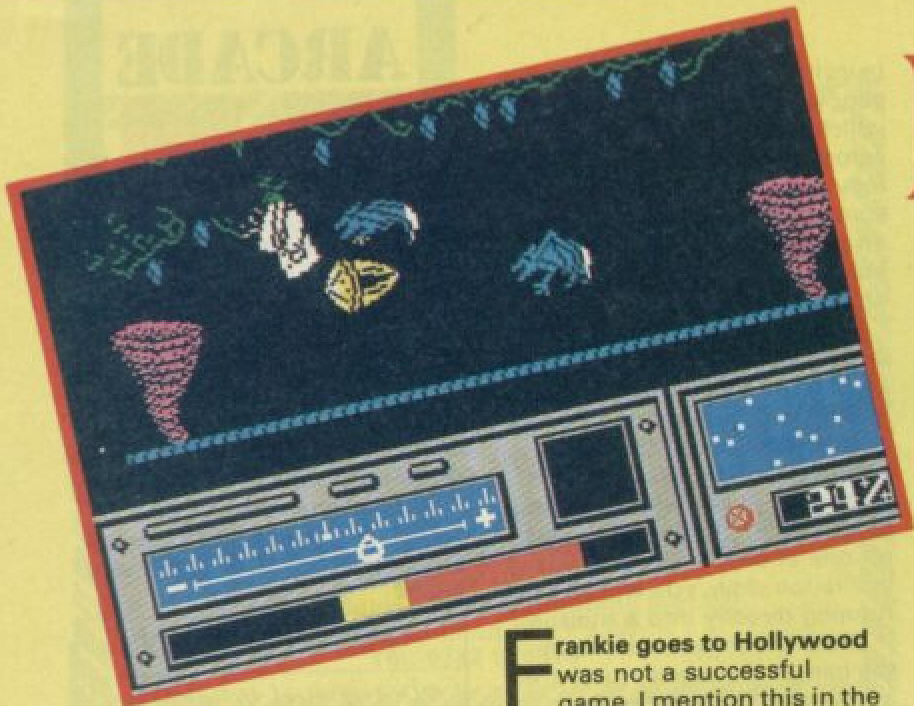
Breakthru is essentially Spy Hunter edge-on. It's fun, easy to get the hang of, but hard to complete. And it's quite addictive

BREAKTHRU
Label: US Gold
Price: £8.99
Joystick: various
Memory: 48K/128K

Reviewer: Jim Douglas

★★★★☆





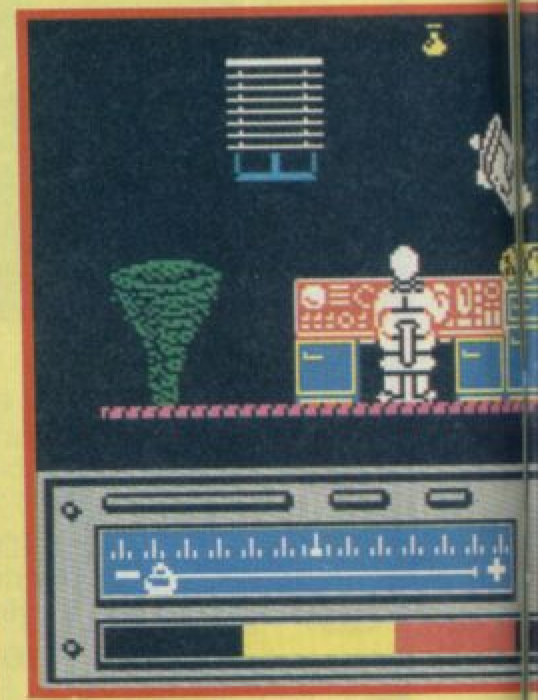
DOUBLE

Double Take is strange.

The idea is this: due to unforseen circumstances matter and anti-matter have met, two universes have collided and as a result things are pretty unstable. You have to get everything back to normal. The way you do this is to explore what could, in other circumstances, be the rooms of a **Wally** game (big graphics, household objects, a smidgen of attribute problems).

What you are looking for is, simply, things that are 'wrong' – objects that are out of place and must therefore properly belong to the 'other' universe. You have to get such objects and, return them to the other universe.

Curiously enough (a sign that there are limits to how many new ideas you can actually get in a computer game) one way you can get the object back to the right universe is just to zap aliens. I forgot to mention the aliens, they are of marginally



Frankie goes to Hollywood was not a successful game. I mention this in the context of **Double Take** because **Frankie** got rave reviews and was regarded as incredibly inventive and imaginative.

Double Take is incredibly inventive and imaginative and if the same fate befalls it the game – buying public deserves all the apalling licencing deals based on terrible films it gets.

Actually reading the **Double Take** blurb boggles the mind. You get the sinking feeling the game is going to be absolutely impossible to understand. It isn't. At one level it's a straight zap-em-up, well, not straight exactly more multi-dimensional. At another level its a leap (quantum) into a surreal world where realities mix and the familiar is odd.

SINCLAIR USER CLASSIC



FACTS BOX

Incredibly imaginative arcade game, with cartloads of fresh ideas professionally implemented – deserves to be big

DOUBLE TAKE
Label: Ocean
Author: Denton Designs
Price: £7.95
Memory: 48K/128K
Joysticks: various

Reviewer: Graham Taylor

★★★★★

CONTACT SAM CRUISE

Sam is da strangest detective. He speaks like Bugs Bunny, does sommersaults to earn his dough and regularly gets hurled off the tops of buildings by agents of the Fat Man.

It's all part of the action in The Case of The Bali Budgie part of **Contact Sam Cruise**, Microsphere's long-awaited **Skool Daze** follow-up.

Budgies sing, so Sam's not surprised when he gets a message from a dame willing to spill her guts about the case on the top floor of the Hotel Royale.

He checks his antiquated detective's kit and prepares to leave the office, located on the second floor of a super-seedy tenement block. OK, so it's the 1930's and not so antique, but there are no laser scanners or fingerprint kits in this game.

Before he leaves Sam has to don one of his eight disguises because there's a contract out on him. There's a chef's costume, a postman, bar-room flossy and an old man. Some of them, the ones displayed in red, are known to the police, whereas the blue ones are unknown to villains and cops alike.

Sam needs the disguise because as soon as he steps outside his door, as himself, he'll be gunned down.

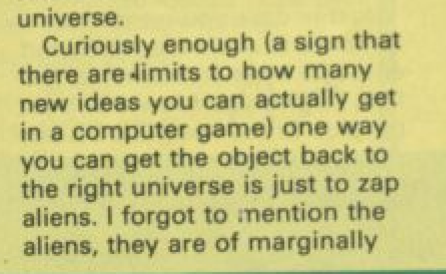
As he moves from one window to another, down and across the building, you'll detect that the playing area is one vast scrolling view of city streets and buildings. You may not be able to see Sam going downstairs but he is, believe me.

When Sam hits the street, turning left on his way to the hotel, he finds gun men hiding in doorways and alleys, policemen on the beat and money drifting along da pavements.

Sam catches da dough by doing handstands and snatching it up in his teeth (seems reasonable enough). It's vital that he perfect his technique as his money dwindles during the case and if he goes broke that's the end! Sommersaults are also useful when dodging the hit men. The bullets may hit our hero but, because he's looping the loop in the air, their effects are minimal.

The technicolour 'tec – yes there is some colour clash – goes into the lobby of the Hotel Royale and slowly, very slowly, up to the top floor. He passes janitors and guests and janitors, all going about their everyday business – but any one of them could be a murderer!

Sam discovers a body on da top floor. The 'phone rings and a greasy voice slips into Sam's ear. The Fat Man's left the key to Number 19 at Number 31. As well as receiving strange calls in the middle of murder scenes, Sam can also make them. To





E TAKE





ARCADE REVIEW

original design but appear in the tried and tested Ultimate style. You don't have to do anything other than kill them.

There are other ways of getting an object from one universe to another – the deeply mysterious 'sparking cloud' is created which provides a tunnel.

So here's how it goes. You (a disembodied overcoat – and why not?) travel around entering and leaving a variety of rooms (via whirlwinds rather than doors). Some rooms look like caverns, other rooms look like laboratories. As it happens I had my first success in the game in a room which was simultaneously an operating theatre and a woodwork room. Having spotted an object that looks somehow odd or out of context you pick it up and 'stabilise' it – sort of get its matter state back to normal – and then wait for the universe state to swing again (or cross universes via the sparkling cloud). Get the picture.

After playing the game for a little while, you realise that actually what we have here is not, despite all evidence to the contrary, some horrendously complicated strategy-cum-adventure-cum-sub-atomic-physics game but actually is just a damn fine arcade game, with more inventiveness than half a dozen other titles.

The graphics are good with effective use of a particularly neat 'dissolve' when the universe switches from one to the other – a process which gathers pace as time passes.

The last section of the game after you have stabilised the universe concerns a battle with a cosmic being called Sumink (a joke I imagine). This involves first finding him/her/it in the anti-matter world using a series of sensor lights and then blasting – it feels a little like an afterthought but who cares?■

FACTS BOX

Sometimes unwittingly hilarious detective spoof with bold, irregular, graphics. Not a case for arcade gamers

CONTACT SAM CRUISE
Label: Microsphere
Author: David Reidy
Price: £9.95
Memory: 48K/128K
Joysticks: various

Reviewer: John Gilbert

★★★★☆

kick off with the only number he knows is his own, but he'll collect others as the case continues.

He won't be making any now, however, as the police have arrived to arrest him for murder. A slow trip down-town to the police station, an interminable wait for bail.

Now try to get Sam into house Number 31 where the key to mysterious Number 19 is. He knocks on the door. If it opens he knows he's got the key. If it doesn't he could break-in and risk getting arrested yet again – da police don't like Sam.

Once inside Number 31 Sam's on his guard. The villains are there and, if they grab the arm of his trenchcoat, they'll drag him on to the roof where it's a three-storey free fall to the technicolour spread on the pavement. If he's lucky he'll end up with a hangover and an empty wallet, while fun lovin' Daisy – his long-suffering secretary – goes off with the James' Gang.

Most of The Case of The Bali Budgie comprises getting arrested, being released, doing sommersaults, being thrown off tall tennements and changing into ridiculous disguises. It's supposed to be a satirical look at the stereotype of an early '30s gumshoe, right down to the cliched language and situations. Some of it is funny. Some of it isn't.

The city plan is large, but by no means massive, and because the whole screen scrolls, the action is slow.

That's not to say that Sam Cruise is a bad game. It takes ingenuity to play and has the hallmarks of an excellent strategy/adventure.

It is not, though a fast arcade bash. There's little action but lots of thought■

DONKEY KONG

FACTS BOX

It's too little, too late. Here we have Kong, three years on and it's much the same. Progress? Who cares?

DONKEY KONG
Label: Ocean
Price: £7.95
Memory: 48K/128K
Joystick: various

Reviewer: Tim Douglas

★★★☆☆

"Everyone," says Ocean "is going ape over Donkey Kong." Tsk tsk. Not only is this statement possibly the most horrible pun in the universe, but it is completely untrue.

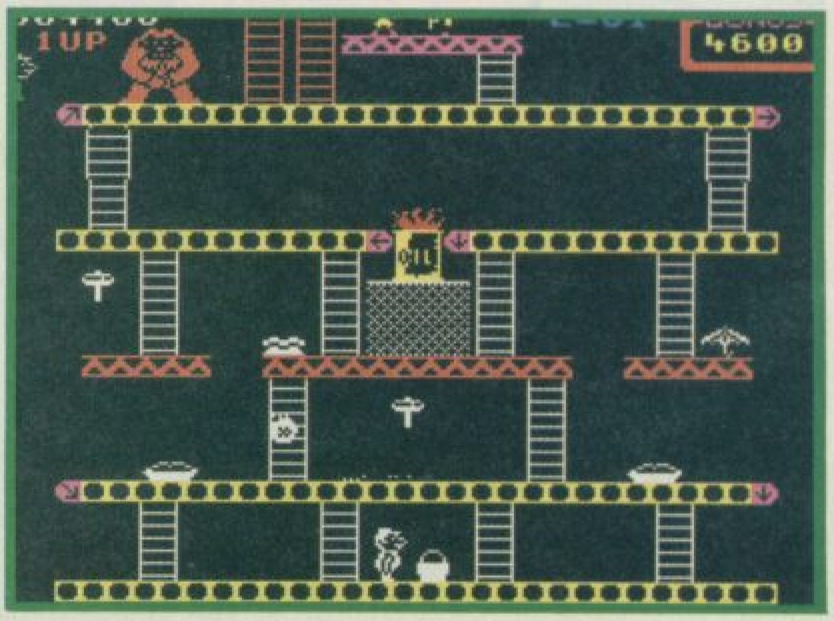
People weren't even particularly excited three years ago when Ocean's other version of the game appeared – **Kong**.

The plot centres around the kidnapping of the hero's blonde girlfriend by an enormous ape who attempts to escape on a platform of even-higher iron girders. Mario, the hero, must negotiate the assault course of falling barrels, fireballs and dodgy ladders.

In fact, when you take a long look at the two games – the original **Kong** and this effort – you realise that apart from some graphics changes, and some improved sound on the new game, there has been virtually no development in the three-year space.

It seems that Ocean has merely put right most of the mistakes they made with the original **Kong**.

Hardly the correct idea really■



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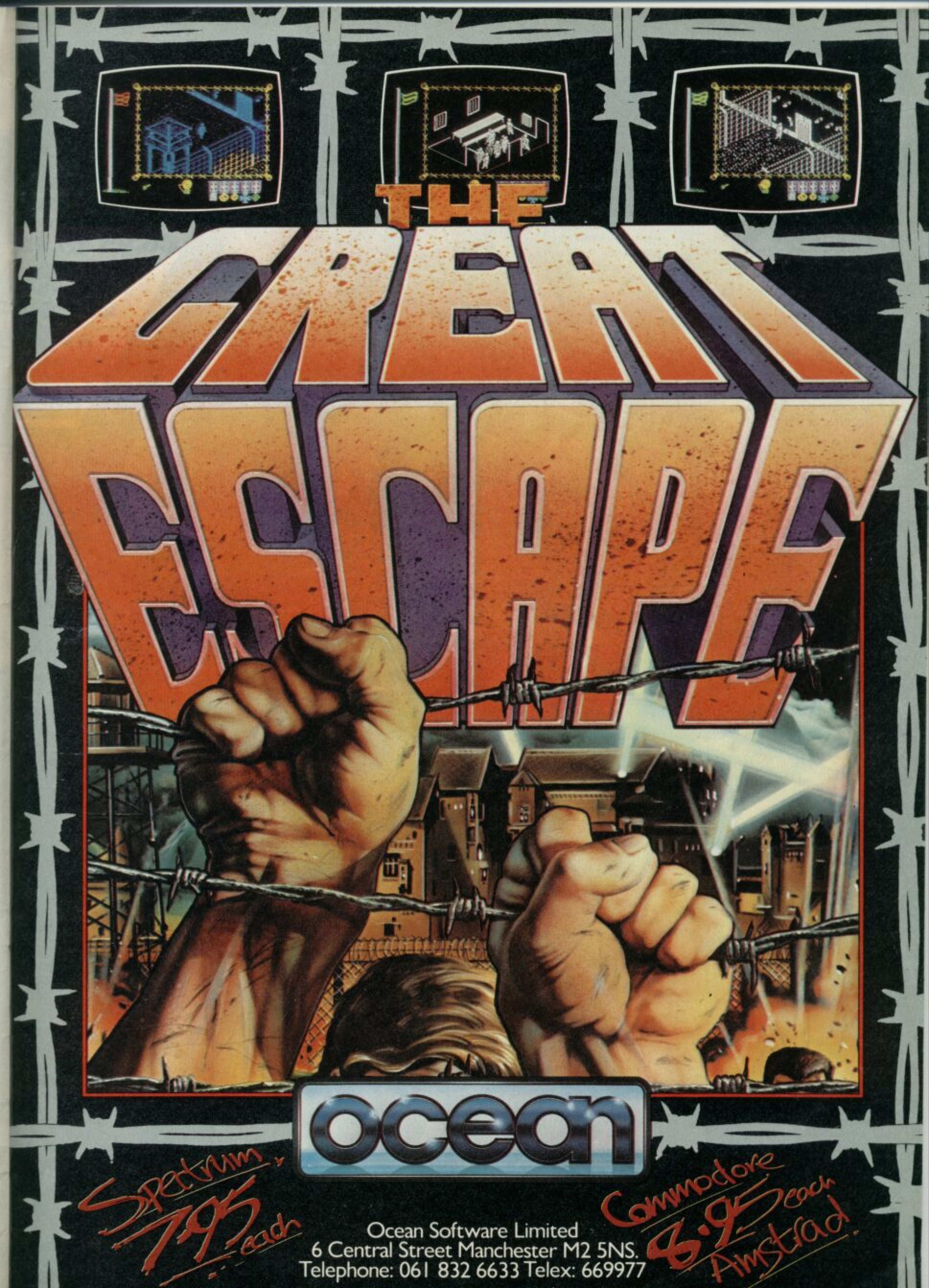
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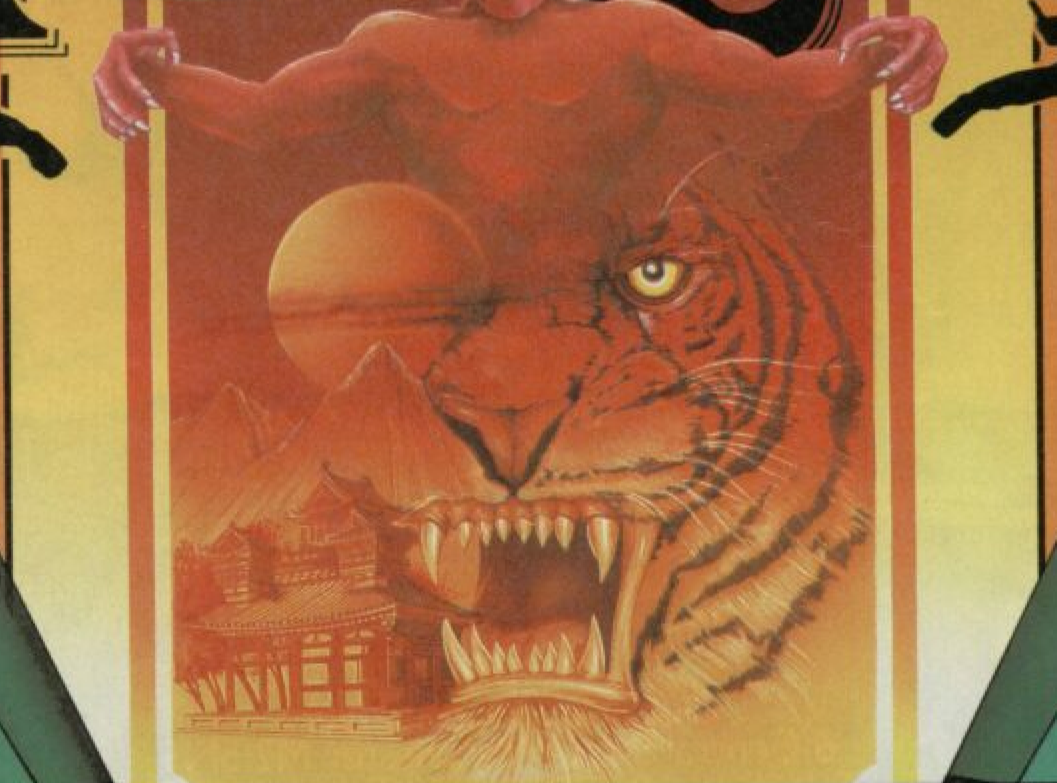
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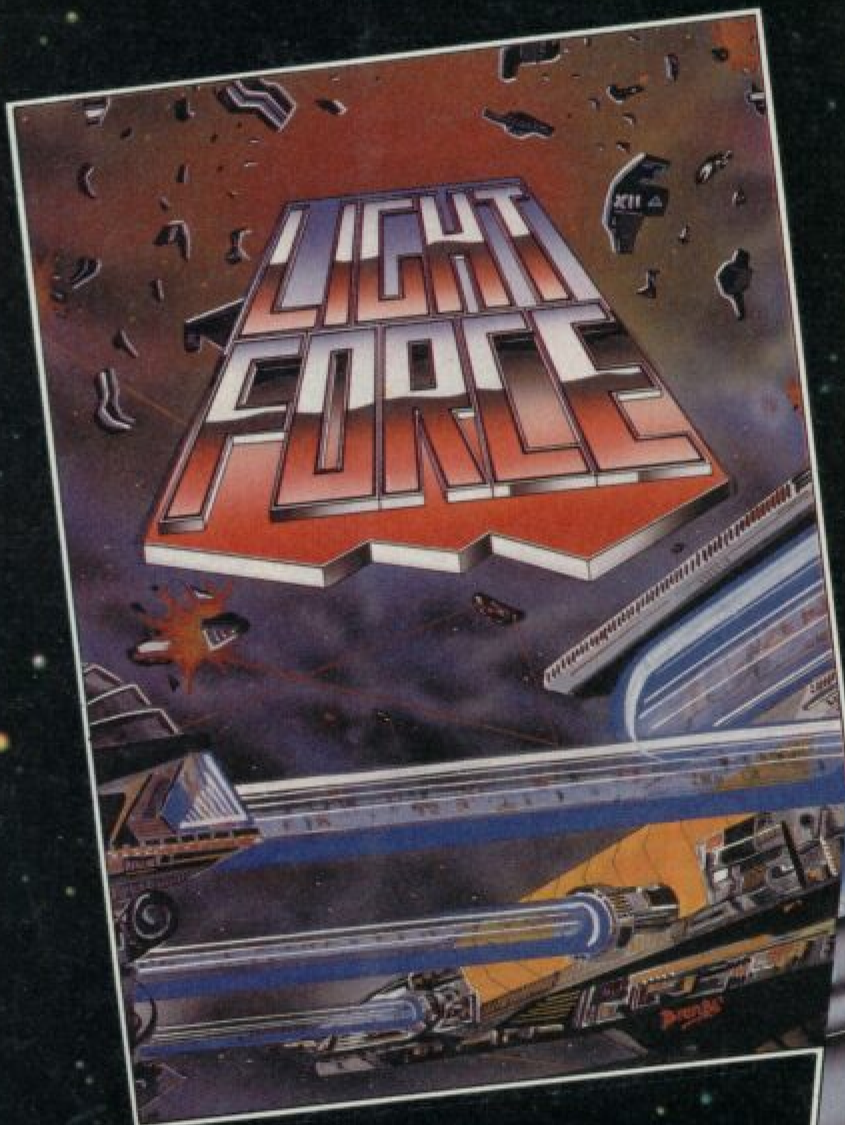
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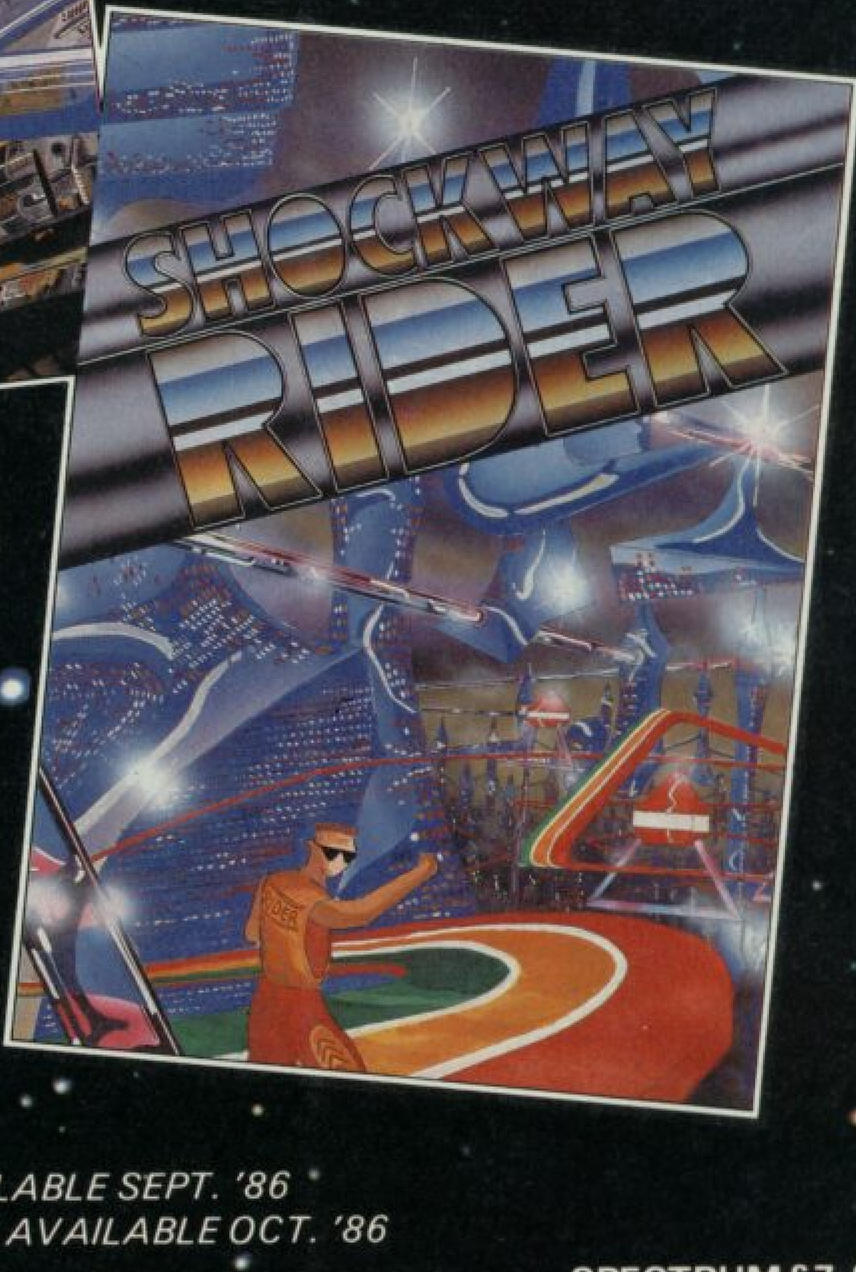


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SHOCKWAY RIDER is the most original arcade game of the year - THE ULTIMATE **FUTURE SHOCK!!**

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ZUB

SINCLAIR USER CLASSIC

BUDGET £1·99 £2·99 REVIEW

Zub is an unusual name for a game. **Zub** is unusual. **Zub** is the most astoundingly addictive game I've played this year. **Zub** has the second best soundtrack on the 128K+2 so far. **Zub** costs £2.99.

Beyond mere the addiction – the entire SU team was obsessed by the damn thing.

People queued up to play it, work stopped, memos were issued there was talk of locking it away.

It's fantastically amazing. Consider this a recommendation.

Try to play it on a 128K if you possibly can. It features all kinds of music, sonic noises and crazed explosions.

Zub starts in the way it means to go on. The opening screen is a mad title page with all sorts of ridiculous credits, next up is an insane control panel. Each panel scrolls around and around like a computer out of control, read it carefully and you'll find crazy error messages.

The game. There is you. And there is a thing. Sort of silly looking with long gangly limbs and a fearful expression.

The sum total of the plot of the game is as follows: you try to get from down (a planet surface) to up (where you get picked up by a tractor beam and sent to the next planet). Getting up there is simple (theoretically). Jump up to a platform then 'ride' that platform until you find another one within jumping distance, and jump one step higher up. Then do it again.

Does it sound easy? Hah. Wrong. There's this thing, this sort of metallic mouth that sometimes sweeps down and knocks you off your perch. The higher you climb the further you can fall. You spend a lot of time falling in this game. The metallic mouth thing starts to get very irritating. There is some defence. You, Zub have a rather puny laser. If you manage to hit the mouth thing it goes away for a while. You probably won't hit it though.

That's it. You keep trying to climb up using the platforms and you keep falling. Just when you think you have finally cracked it you fall a very, very long distance. The point is you get better. Gradually you learn some sort of technique and finally after about fifty times I got through the first level – playing it on 'Easy peasy' (on Level 4 it's, 'I would say' impossible. It was a pretty dramatic moment I can tell you. The next level features a different annoying alien (a jellyfish – see I told you I really did it) and in between is a sort of bonus extra energy section. Basically it's more of the same but who cares?

Zub is a vital purchase■

FACTS BOX

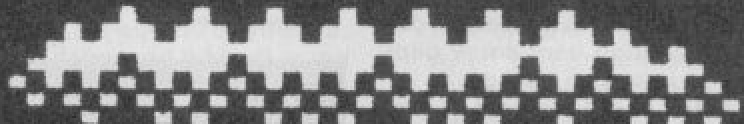
Possibly the most addictive arcade game released on the Spectrum this year. So simple yet it's absolutely stunning

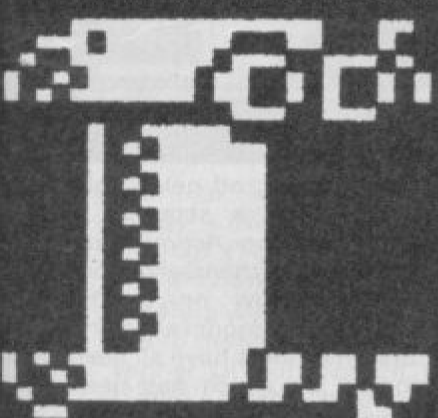
ZUB
Label: Mastertronic
Author: Binary Design
Price: £2.99
Memory: 48K/128K
Joystick: Various

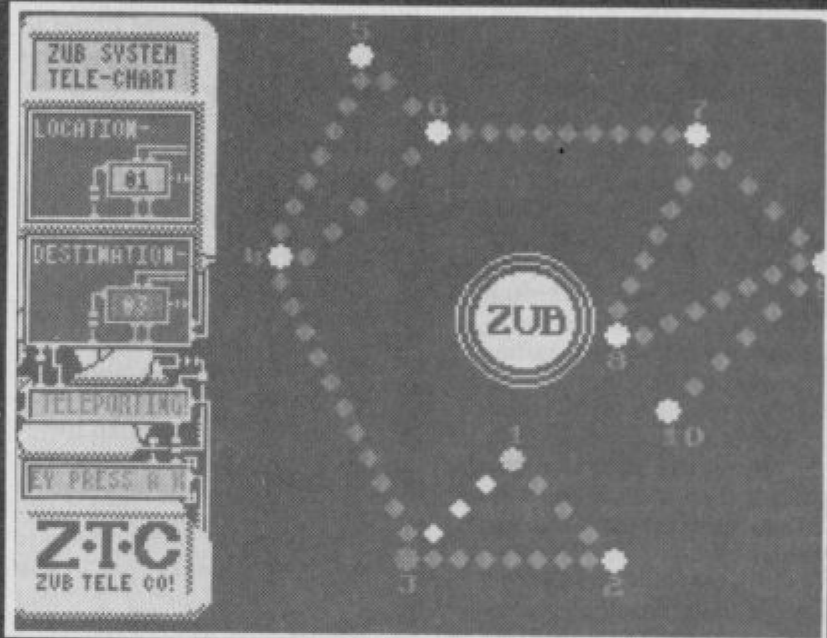
Reviewer: [signature]

★★★★★









OBLIVION

Oblivion is well, pretty bad. Actually **Oblivion** looks like the sort of game software houses use as the 'demo' for easy-to-use games creator programs (that don't sell).

It's probably distantly related to some of Jeff Minter's ideas but really is as thrilling as a lecture on flower arrangement.

The front end of the game is misleadingly neat, big graphics for the joystick and keyboard select options – currently toggled choice waggles. Pretty slick you think. But no.

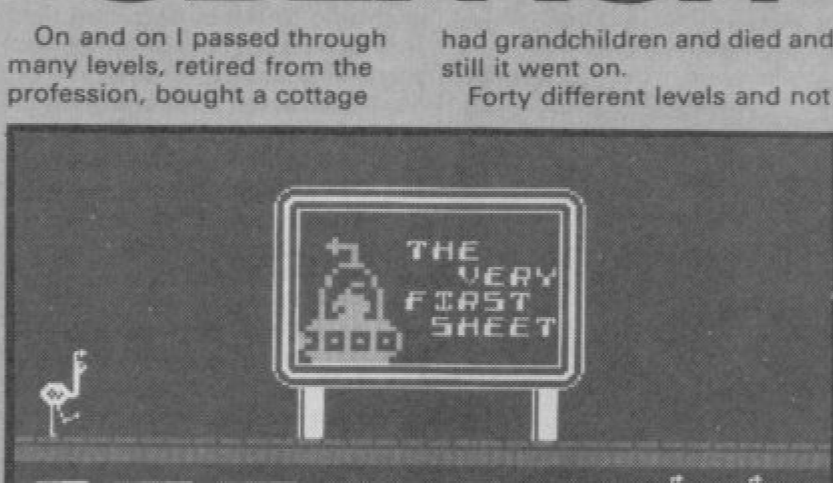
You are an Ostrich. Pretty macho eh? You have to walk or run across dozens and dozens an dozzzzennnnnssss of screens.

Each screen with a small troup of tiny non-animated sprites (well they sometimes bounce up and down a bit. Sometimes your bird jumps over them, sometimes you shoot at them.

On and on I passed through many levels, retired from the profession, bought a cottage had grandchildren and died and still it went on.

Forty different levels and not a one less than completely dull.

I know it's budget but honestly I'd rather go to Billingham



FACTS BOX

Screen after screen of terminally dull action. A quite exceptionally tedious game. Bound for oblivion on a fast train

OBLIVION
Label: Alpha Omega
Author: Simon Morris
Price: £1.99
Memory: 48/128K
Joystick: various

Reviewer: [signature]

★☆☆☆☆

JON RIGLAR'S ZA CH



Crimble is here at last ! Amongst the millions of cards that have arrived, there'll be the usual dozen or so packs of white handkerchiefs and numerous pairs of bright green socks. You'll be pleased to hear that these will have been made good use of, each member of staff taking one and hanging it up over the appropriate fireplace. Graham plastered his with screen shots of Lightforce, **John has sent his to Amstrad in the hope that they'll send it back with a 128K+2 inside (it's the only way we can get one!), David, the Ed, has converted his into a coffee cup.**

Hidden somewhere in this column are tips for Glider Rider **and** Great Escape **and the complete solution to** Dan Dare.

Uridium

is another great game from Hewson. Watch out for a **Uridium** high score table in the near future. After at least two-and-a-half minutes of play, the cool team are able to bring you some tips on how to complete up to Level 2. Here are some for Level 1.

Level 1: Zinc

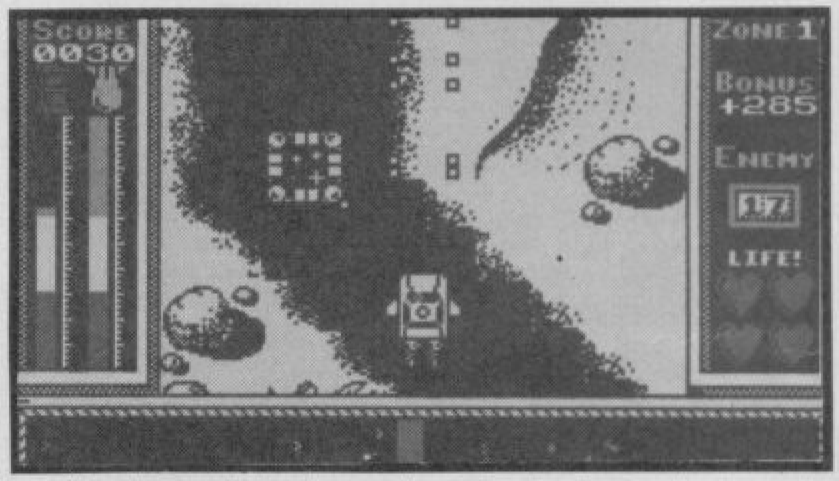
- It's best to fly as fast as you can. Although this sounds stupid, you find that sometimes you avoid death simply by being flukey
- Whatever you do, make sure you learn the layout of the section you are flying in. This will allow you to fly full speed without crashing nastily into walls etc
- Work out the routine of the enemy aircraft. At the start they all follow a set pattern, but your actions can change that
- Whatever you do, don't fly over a generator or stay in the same screen as a generator for too long. The generator will sense you're there and will send a mine after you. This on the whole, is very bad. You can get away with flying over one, provided that you are at full speed
- Your Manta spacecraft can fly through very small gaps by turning on its side
- In Level 1 it's best to stay at the top. Most of the craft attack from the middle.
- At the start press down to be sure that you miss the aerial!
- Again, learn the layout so that you can fly fast but with reasonable care
- The only difficult part is where you need to dive through a very small gap – here you need to do a special dive. Basically, follow most of the hints formed in Level 1 to be on the safe side. What I'm really saying is that I can't get much further and hope that by the time the next issue comes out I'll have better tips.

Now for some serious news. It appears that in the November *Zapchat* a cheat facility was quoted for

Stainless Steel.

The code was quoted as a,l,i,k and *Enter* – try pressing the letters s,i,l,k together instead. More serious grovelling here. After months of

Ricky Shell cheating his way down that endless road

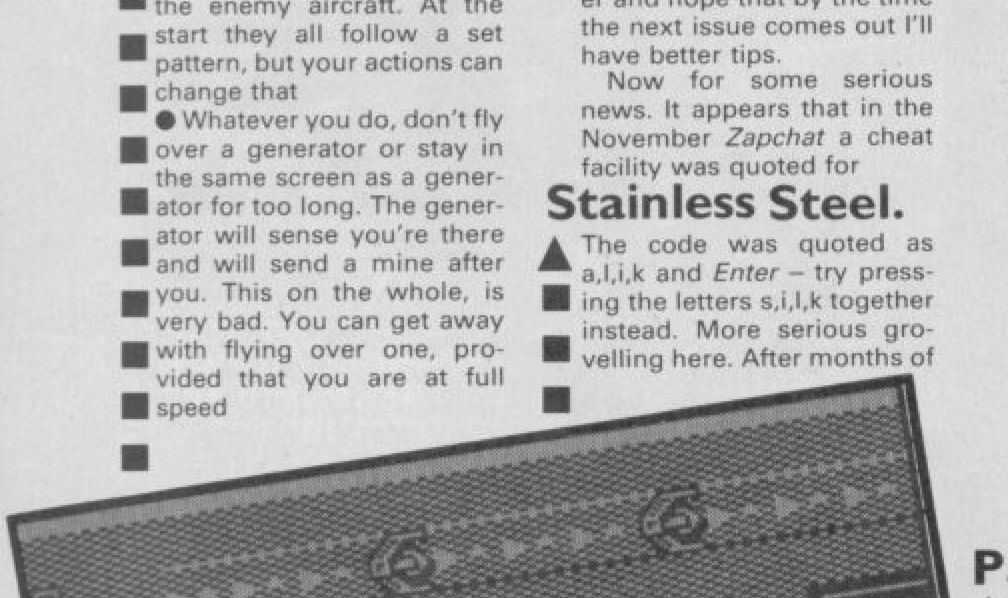


debating and wheeling and dealing we had hoped to bring you the **Highway** Editor thingy but the deal fell through! Ahhh! This is probably because Norm and our bodyguard tried to bounce its author around the room and he promptly left the country in the direction of foreign parts – Bognor Regis in fact. Commode has been kitted out with John Gilbert's espionage outfit and is running in the correct direction to try to get the proggy back. Perhaps next month . . .

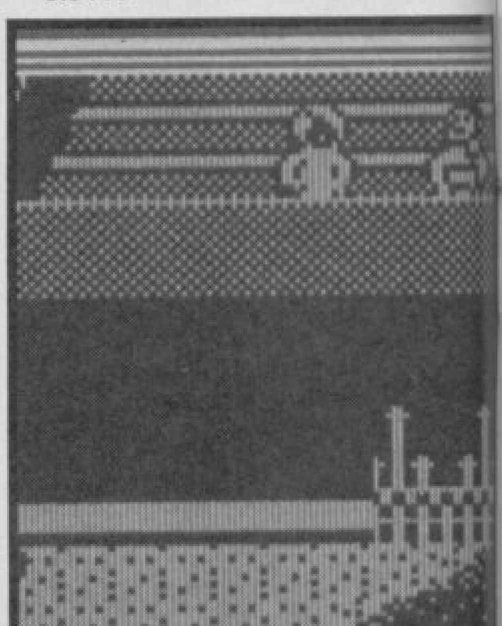
Now for something completely different. The ideas department has found a use for all those high scores sent in to *Zapchat*. Loads of

Paperboy

high scores flooded the office last month and so, as a dummy run, a high score table was designed. So, what's so special about ours that hasn't already been done? Well, ours is a top eight instead of a top ten and that will do. Each month we're gonna set the *Zapchat* Challenge in which we name a game and you yank and crank that joystick to get a high score. If it works, we'll print the top eight the following month. Those who try to cheat and get caught can choose a sentence – either playing *Action Biker* or throwing themselves out of a window on to the nearest Commodore factory. Staff members have all been locked up which has been causing quite a few problems. For the Feb issue we want your high scores for **Lightforce,** so get yanking etc . . .



▲ Uridium



AP
AT

Zapchat Big Eight No 1: Paperboy

	Score	Name	Verdict
1	109,430	C. Sommerville	Must be fabrication
2	87,420	P. Lord	Sounds tacky
3	73,490	G. McLellan	Well um . . .
4	70,190	S. Compton	Naff
5	69,480	I. Griffiths	Reasonable
6	69,290	D. Batterton	Poor
7	65,800	D. Norton	Very low
8	64,000	S. King	Last, Ha!
9	324	G. Taylor	You can't get away with it, Graham

Now it's **Light Force**,so no *Paperboy* high scores! and get back to your cage Graham!

On to more important things – like my pay! Only kidding! (You can stop hitting me now).

Before we go on, we'd just like to mention this month's winner of our 'Nut of the Month' award. It goes to Jean Rows who is apparently a *Headbanger's Monthly* spy and yet was stupid enough to tell us! Ya boo etc . . . Jean comes from 'sunny' Bognor Regis and that explains a lot.

Compiled with the help of official EMAP Father Xmas, Matt Norman (you can tell who it is by his writing) – here's the special edition of

Glider Rider

tips. Follow the instructions on how to destroy each reactor in turn, and use the incredible full-colour maps in *Map Chat* over the page as a guide. Use the overall plan of the playing area to find the ten arrangements of the reactors.

At the start drive around the reactors which we mentioned before and work out which line of action you are going to take. It's sometimes better to attempt the harder ones first and when you are low on energy press *Break*. If you repeat this you'll find that eventually you will succeed in destroying the harder reactors. Now you must destroy the eight reactors that are situated outside the complex.

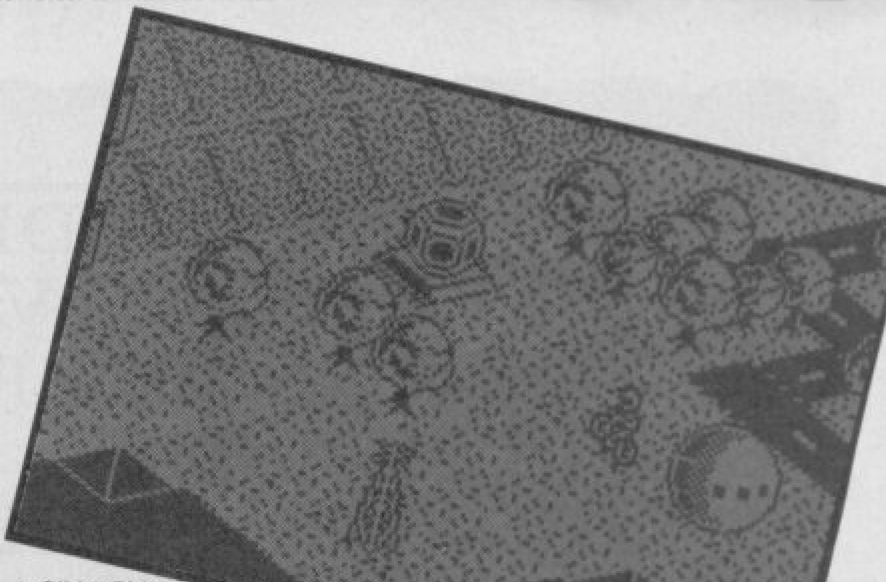
● **Reactor 1** This is a very hard reactor to destroy. Ride over to the side of the pylon, P1. Next ride into it to prematurely activate the laser. Provided you are quick enough, you can scarper down the slope and take off to bomb the reactor. Then run for it.

● **Reactor 2** Approach the pylon, P2, from the top of the hill to ensure that the laser doesn't shoot at you. If you're unsure as to the exact location of the reactor, then ride down from the top and go on until you hit a tree. You'll notice that the reactor is directly below the pylon. Climb back up and ram the pylon. As quickly as you can, ride down and take off at the lowest point. This takes some practice. Fly directly over the trees without landing on them (landing on them deducts marks off your energy). If you find that you're constantly going out of control, then try to gain more height when you first take off. Drop a bomb when you are roughly over the reactor.

● **Reactor 3** This has got to be one of the easiest reactors. Drive up to pylon, P3, and run into it. Roll back down the hill as quickly as you can. Turn round and take off as low down the hill as you can. Fly straight and bomb the reactor. You don't need to worry about the laser, because by the time you've destroyed the reactor, you'll disappear out of the screen and will be safe.

● **Reactor 4** Another hard reactor. Basically it involves a short take-off area coupled with lots of trees to sap your energy if you land on them. Activate the pylon, P4, and ride up the slope, turn right when you're beside the laser and drive down the opposite slope. Take off and try to gain height. Fly as straight as you possibly can to avoid unwanted tangles in the trees. If you've timed everything correctly, you should be able to bomb the reactor and get out of the screen with only minimal damage.

● **Reactor 5** Due to the short take-off area, this reactor can cause a few problems. Ride into the pylon P5 as usual to activate the laser. Then carry on along on the same level until you are roughly in front of the tree if you've still got time, then ride down the slope and take off. Once in the air, you are fairly safe as, if you bomb the reactor correctly, you will fly on out of the screen and escape the laser.



▲ Glider Rider

● **Reactor 6** This is where things start getting exciting. Stay on the middle level where the pylon is situated. When you've had a good look around – ride into the pylon and set off the laser. Quickly ride round the trees and head out towards the sea. When you start down the slope, turn round and take off. Bomb the reactor and press the *Down* key to make sure you land straight away. You'll also have to land in the right place, otherwise you could end up in the drink. Once you land, turn right and scarper as fast as you can.

● **Reactor 7** This is the easiest reactor of them all. It's on the other end of Reactor 3's hill. Climb the hill and activate the laser. Dash straight across and down the slope where you should take off as low as you can. Press *Up* once you're in the air and bomb the reactor. You shouldn't need to worry about the laser as you will disappear out of the screen as soon as the reactor is destroyed. Land as soon as possible once outside the screen.

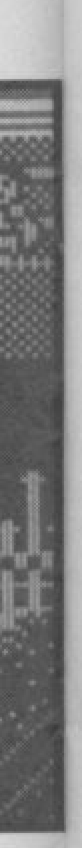
● **Reactor 8** Don't panic! This may look daunting but it is, in fact, quite simple. Experiment driving from the laser to the reactor via the slope and vice versa. You might find that bumping into the tree before you go down the slope will help you judge a correct line for take off. When you're in the air, drop a bomb immediately and press *Left* to move your glider out of the screen before the laser can blast you.

Now check your energy – if you are below 40 then consider trying again – you'll need the energy when you're inside the complex. If you are lucky, and have plenty of energy left, then now it's time to get inside the complex itself.

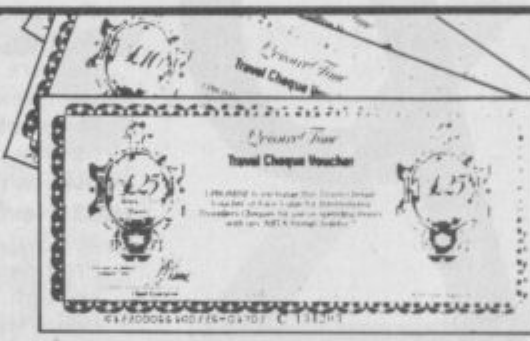
By now you should be getting excited. To get inside the complex is a fairly safe business, provided you've enough energy. You should have noticed that as soon as you destroyed the eighth reactor the rest were all activated. Don't panic – this is meant to happen. Drive around the wall until you reach the top right-hand corner. Climb up the nearest hill, take off and head for the wall. You will need to press *Up* to make sure you don't just crash into it and go out of control. It may well take a lot of practice, but there is always a nearby window to throw the computer or yourself out of.

Once on the inside, have a good look around and provided you have enough time left, you should find some interesting things. As you explore, it will become obvious that there is another wall which needs to be scaled before you can go further inside. The top right-hand corner of the complex will provide a safe take-off. Don't be put off by the fact that you are taking off from an activated laser! You'll need to direct the glider *Up* to make sure that you don't crash into the spikes. If you manage this then you have virtually completed the game. Drive around the complex and before you know it, you will easily locate the last two reactors.

● **Reactors 9 and 10** These are the last reactors to destroy and are inside the complex. I will tell you how to get inside in a few minutes, but first here's how to destroy them. Both are right next to each other and are incredibly easy to destroy. As you can probably see from the outside, the complex is designed out of Dragon 32s and other junk and useless materials. The reactors are placed in a dip which allows you a safe and unobstructed take off approach. Fly over and bomb the first one. No matter how hard you try,



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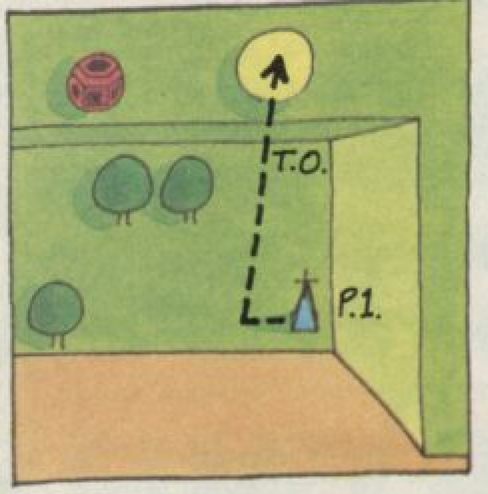
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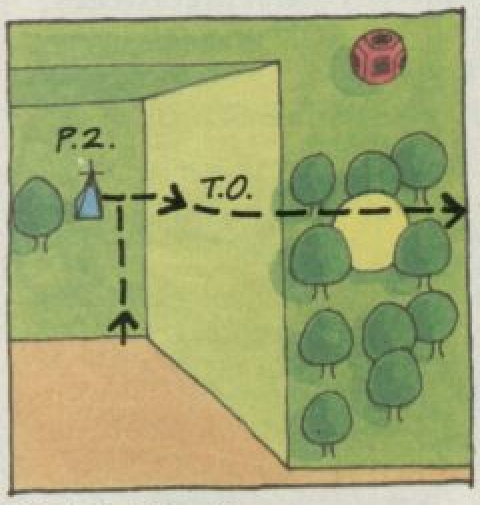
REACTOR 1.

you will not be able to destroy both at the same time. So, land and turn round. Drive back to the same take off area and repeat the same procedure.

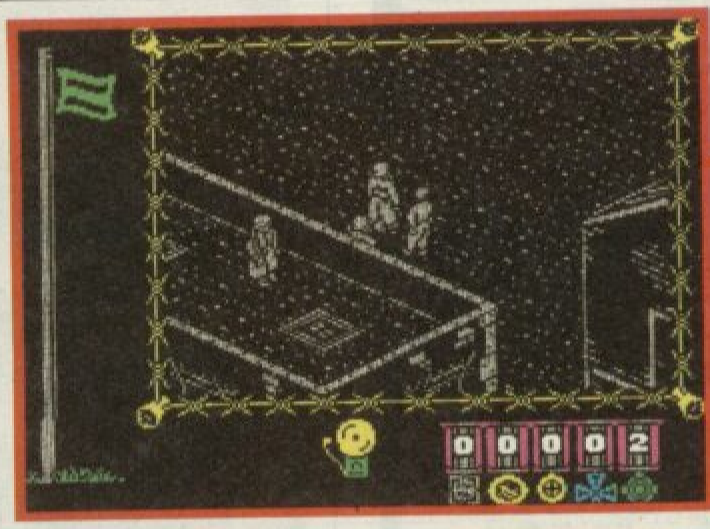
Once these are destroyed, turn round and scarper back the way you came. When you are outside the complex, drive to the nearest hill and take off in the direction of the sea.

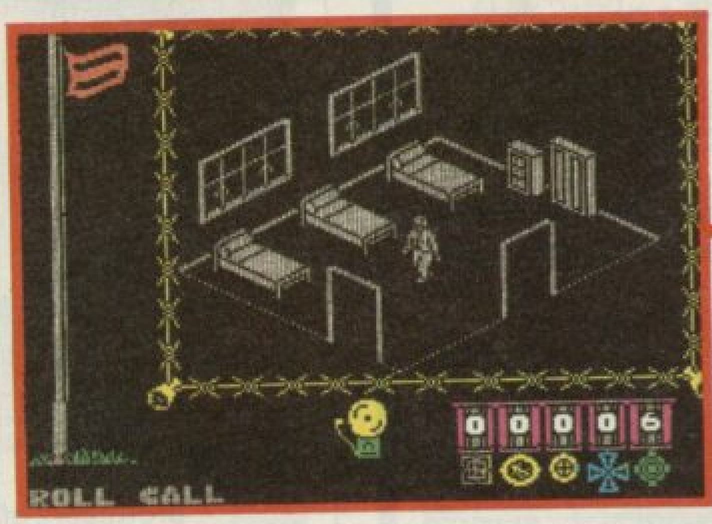
Here's the disappointment. Nothing else happens except a message appears. No fancy 128 tune or finishing sequence, no opportunity to play again at a different level or anything at all. You don't even see your sub! The rather puny message that appears says: 'You've complete the game and escaped with your life – don't let it go to your head!'

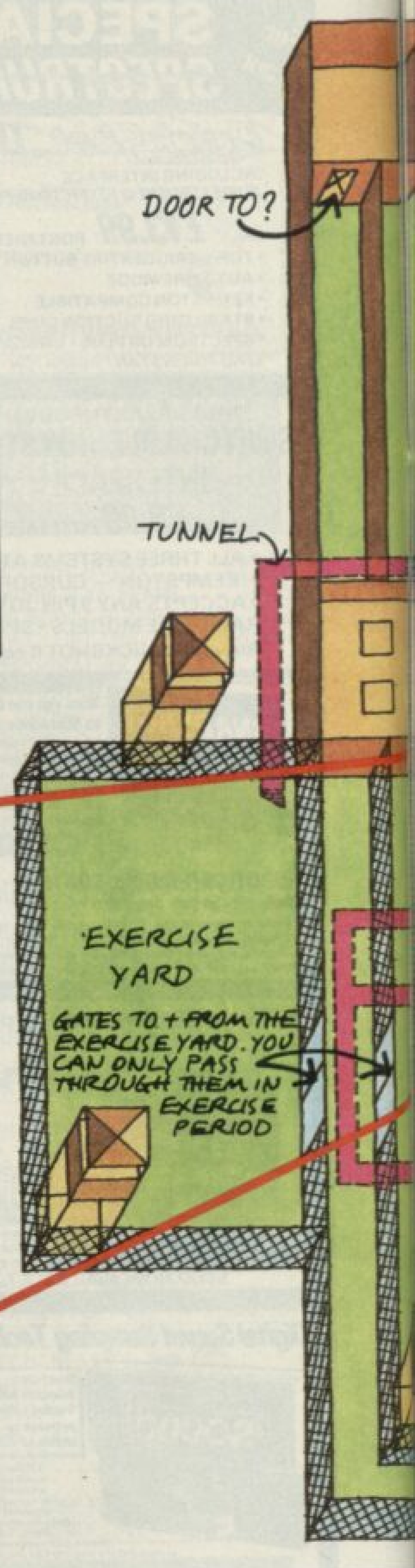
The art department has been working overtime this month and has great festive jolities in presenting this 3D map of *Glider Rider*. It shows roughly the location of the ten reactors. To enable you to see the 3D effect you will need the wonderful and totally original spectacles. If for some reason these are absent, then rush to your newsagent and shout obscenities at him. If they're present then something's wrong. If I'm having you on then I'm a computer journalist.

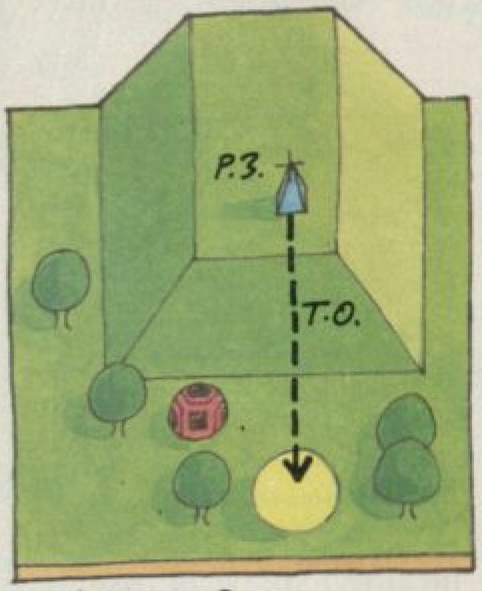


REACTOR 2.

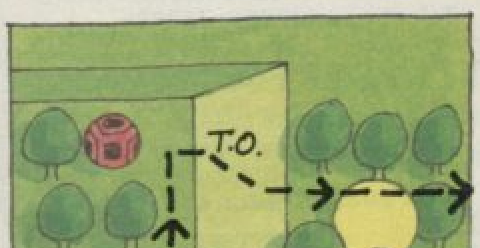




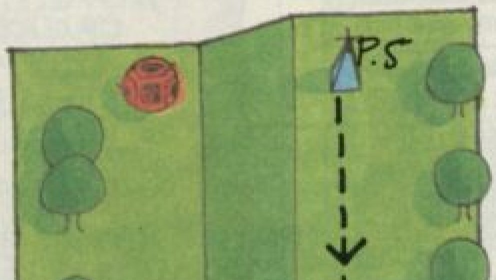




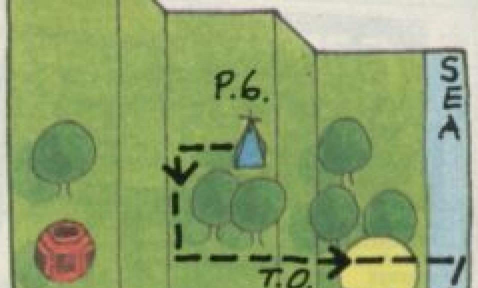
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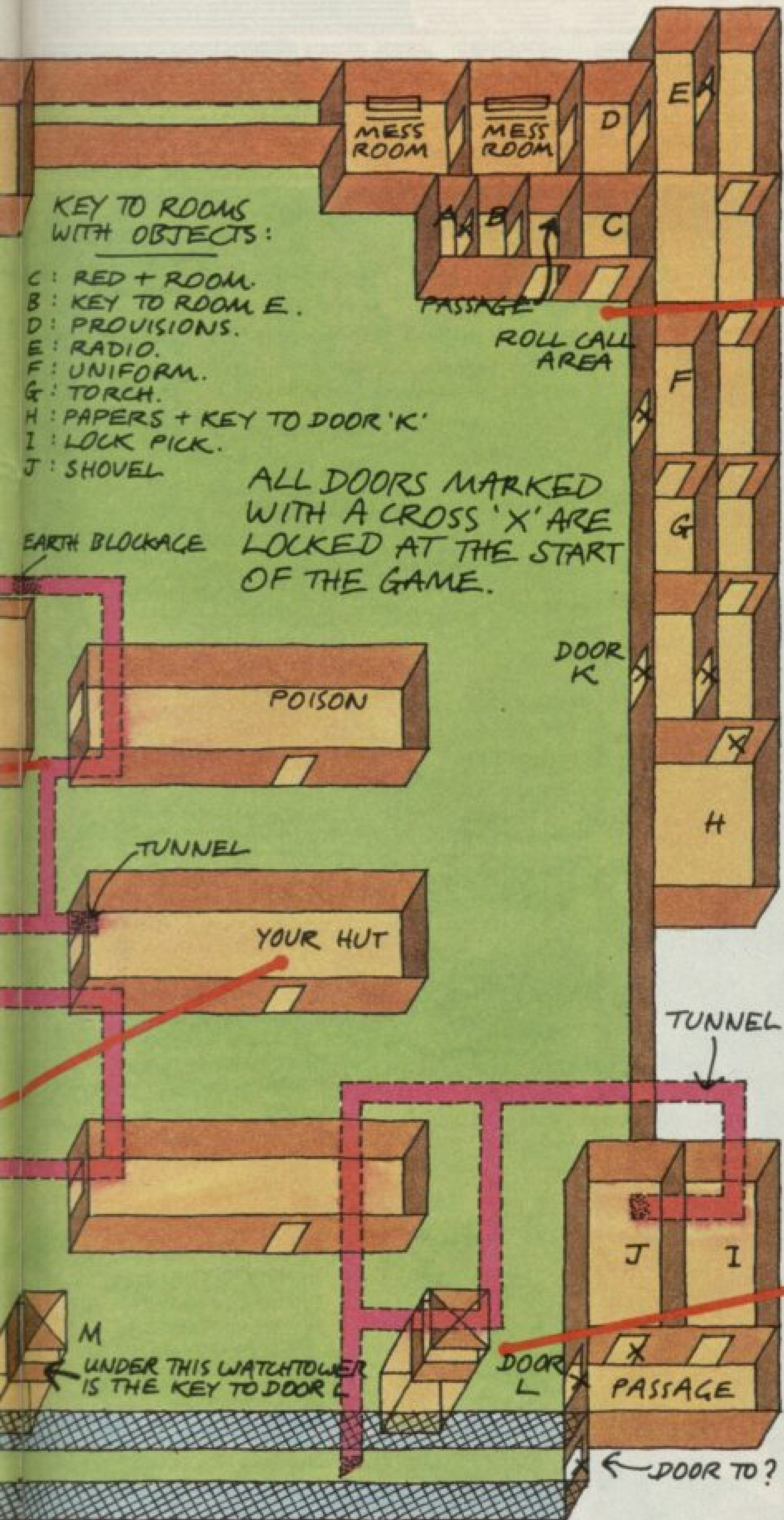
REACTOR 4.



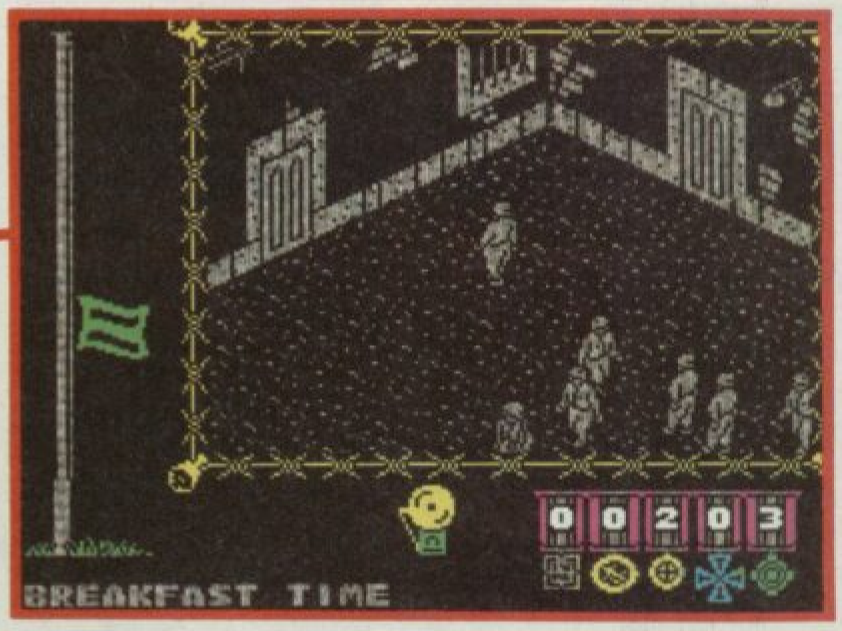
REACTOR 5.



REACTOR 6.



MAP CHAT

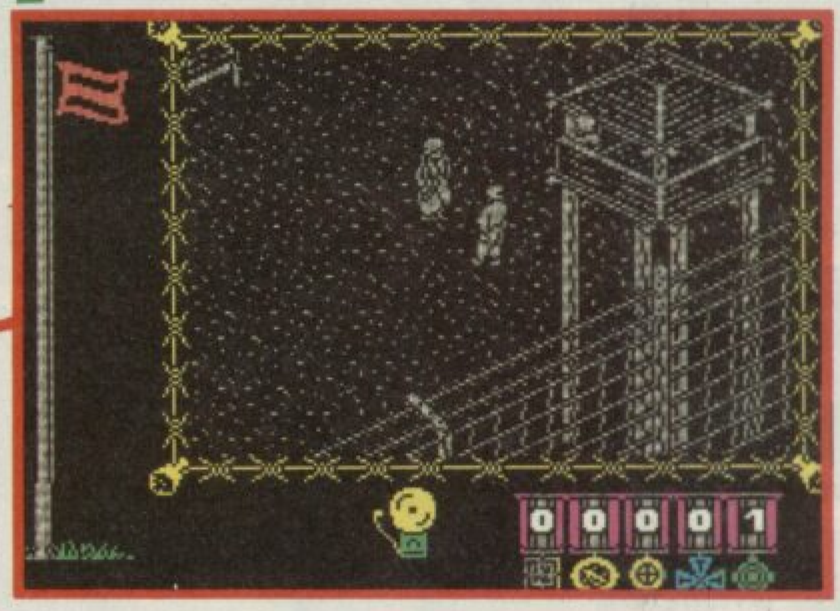


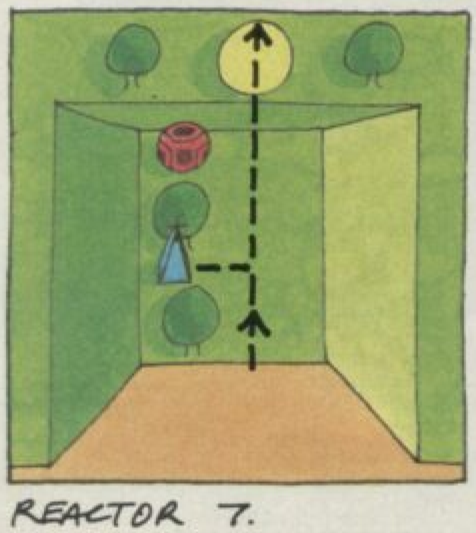
Here's another morsel to wrap your teeth around. Here's how to complete

Great Escape

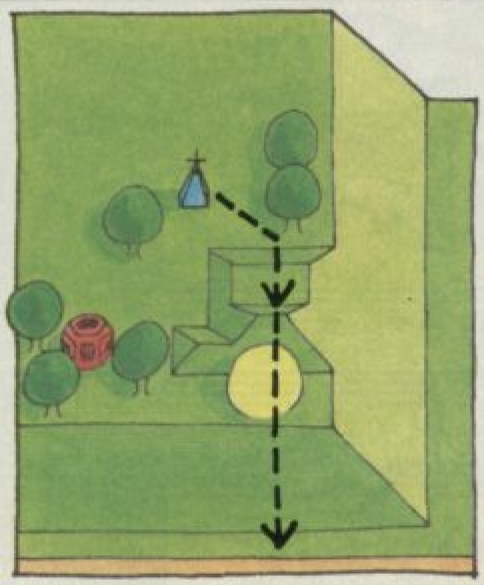
for any of you who should wish to, old bean. Charlie Morgan has sent loads of tips and a map – printed here in glowing technicolour. To start off with let's see what each available item does:

- *German Uniform:* Very, very useful. Pick up what looks like a pile of old blankets and use them. You will be transformed into a German guard. This disguise will allow you access to parts other uniforms cannot reach. Watch out for the Commander though, he'll recognise you even in the garb. Note, when you appear from the tunnels, you'll need to wear the uniform again
- *Provisions, Radio:* Nothing but red herrings. You can't even listen to the Pubslinger on Radio One

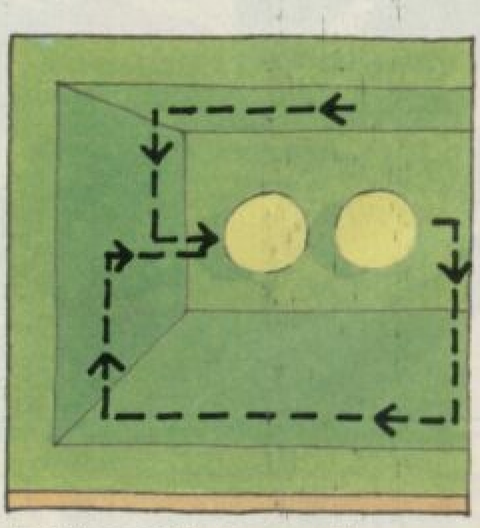




REACTOR 7.



REACTOR 8



REACTORS 9 + 10



AMSTRAD £8·95
ZX SPECTRUM £7·95
COMMODORE 64 £8·95
Yie Ar KUNG FU II
Imagine
..the name of the game
The officially endorsed game by
Konami
Sequel to the hugely successful Kung Fu simulation.
Eight more deadly opponents to combat as you develop your karate skills and advance to become a black-belt master.
Authentic fighting moves with 4 different locations create an outstanding and realistic atmosphere.
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JON RIGLAR'S ZAP CHAT



● *Wirecutters:* Found in the Red Cross Parcels. Pretty obvious what they are for (What are they for? Ed). Hide these in a tunnel to make sure that nobody else gets hold of them

● *Bribes:* These look like chocolate bars. Pick one up and chase after a fellow prisoner. When you need a diversion walk into the prisoner and press *Fire* with *Left* or *Right,* ie the *Use* instruction. Hopefully, the bar will be taken and the prisoner will shout help or something to distract the guards allowing you to jump on to your bike and jump over the nearby fence

● *Torch:* You need this to explore underground tunnels. Once you get the hang of the layout of the tunnels, you'll be able to crawl through them in the dark

● *Shovel:* You can dig through the blockages in the tunnels with this. Pretty obvious I think, old bean

Now, all you need to know is how to get out. It's surprisingly simple. You can get out with the wirecutters by escaping when you are at exercise time. However, you'll be unprepared for life outside and will need some things to back you up. The best items to get are the wirecutters, the papers and the compass. The wirecutters and compass are easy to get – they arrive in the Red Cross Parcels on the 3rd and 5th day. Hide the wirecutters down your tunnel. To get the papers, you need to lock picking equipment. To get this you need to get the key from under the bottom right watch tower. It is barely visible and certainly doesn't look like a key. Grab it, and now you can unlock the door to obtain the pocket lock pick. See the map for door details. You'll have to wait a short time when you are picking a lock and so you need to be sure there are no guards about. Hide the papers in your tunnel. Now get the wirecutters and the papers together and wait until exercise time. Cut a hole in the perimeter fence and drop the papers outside. Then get back inside the exercise area very quickly.

Follow the rest of the day's routine. Next day, grab the wirecutters and the compass and when it's exercise time cut another hole in the fence and scarper outside. Drop the wirecutters and pick the papers up. Now, run off the screen as quickly as you can and you've done it!

That's not the only way out, though. There are many others, which you'll have to find for yourself.



Well, we've come to the part where Jon is gagged and sent off via first class mail to the nearest cafe that sells cheeseburgers.

This means that the rest of us can have a bash at the keys and bring you codes that might just work. As a loyal fan of

Dan Dare

Norm has hunted down the complete solution to the game. Col 'Mekon looks just like me' Leeds refused to draw any more maps and so the tips look like last month's Batman do-das. Here goes:

Right, right, down, right, down, down, right, right, up get the SDS thingy, down, down, left, left, left, left, walk to the far left of this screen, insert the key and one of the lights will flash indicating that Stage One is complete, right, right, right, right, up, up, right, right and jump over into Section Two, right, right, right, right, right, down, left, left, left, left, jump the gap carefully. Left, down, get the SDS thingy, right, right, right, right, right, up, up, left, left, left, left, left, down, down, left, left, left, left, insert the thingy, right, right, right, up, left, down, down, right, right, right, down, right, right, right, up, up, get SDS, down, down, left, left, left, left, left, up, left, left, up, up, right, down, left, left, lefdt, insert the thingy. Right, right, right, up, left, down, down, right, right, right, down, right, right, right, right, right, up, up, right, right, right, right, right, right, down, left, left, left, left, left, down, right, right, right, right, right, grab the SDS do-da. Left, left, left, left, left, up, right, right, right, right, right, up, left, left, left, left, left, left, down, down, left, left, left, left, left, up, left, left, left, up, up, right, down, left, left, left, insert do-da. Right, right, right, up, left, down, down, right, right, right, down, right, right, right, right, right, up, up, right, right, right, right, right, right, up, left, left, left, left, left, up, up, right, right, right, right, right, right, right, up, left, left, left, left, left, up, up, right, right, right, right, up, left, left, left, left, left, left, pick up SDS do-da. Up, right, right, down, right, right, right, down, left, left, left, left, down, down, left, left, left, left, left, down, down, left, left, left, left, left, up, left, left, left, up, up, right, down, left, left, left, insert SDS slot. Left, left, up, up, left, left, and you've done it!

Dan daring to leap where others fear to tread ▼



Ewan Sandison from Alton, Hants has completed

Molecule Man

after having worked out a cheat mode giving infinite everything: 55 Poke 64585,0



That's it folks! The team are now going to stuff themselves silly over Christmas and have numerous 'well it's nearly Xmas' parties. If we haven't all got permanent headaches, then we'll be back next month with some more tips for **Uridium** and the **Lightforce** high scores chart. Remember: No cheating!

Whatever you want to say, say it to: Jon Riglar, *Zapchat, Sinclair User,* 30-32 Farringdon Lane, London EC1R 3AU.

FESTIVE QUIZ!

Think you know about computers? Then this isn't the Quiz for you. The Sinclair User Christmas Quiz has been especially designed for those who wouldn't know a bus it it ran them over and those who think chips were always better wrapped in newspaper. Could you make it in the computer world? Find out below:



IF YOU WERE A PROGRAMMER . . .

1) Sir Clive Sinclair approaches you at a party with a job offer working on a serious computer based on latest transputer technology – it will have a keyboard made of sticky-back plastic. Do you:
a) Look impressed and say "tell me more".
b) Laugh hysterically
c) Offer financial backing
d) Pretend to be unwell and run to the loo.



YOU ARE AN ORDINARY PERSON...

2) You are thinking of buying a computer in a well known electrical chain store. You would like some information. Where do you find it?
a) From a colour advertisement in the *Sunday Times*
b) From Norman Bates (you can read the little plastic label on his nasty junior management type suit) who works in the computer department of the store.
c) From a man next to you in the shop who says he had just had to return his sixth computer because it does not work properly.
d) From Sinclair User magazine (Price £1.00 monthly)

YOU ARE A SOFTWARE HOUSE . . .

3) You are the owner of a software house called Firework software (They're Explosive! is the imaginative ad copy.) You decide to launch a budget range. What do you call it?
a) Sparklers
b) Squibs
c) Squirts
d) Bangers
4) You are about to launch a Christmas title. Which best describes it?
a) A mammoth multi-part graphic adventure that's taken five years to finish and pushes the Spectrum to its limits.



b) A serious but extremely useful business utility
c) Based on *Sky Angels* a recent Hollywood blockbuster starring Tom Voyage, released on twelve formats, awful on every one.
d) Probably not actually going to be out by Christmas as such except possibly on the ST.
5) Firework Software is about to launch a mammoth five cassette adventure. It comes with an enormous map and a 300 page booklet. This begins "Long ago in the time beyond time in the dark land of. . . " What would be a suitable name for the dark land?
a) Belgravia
b) Rhyll
c) Tharg
d) Nooky Vale
6) The mystic orb which features prominently in the game (stolen from the elves by the Prince of Elron) is known as the orb of . . . .?
a) Tharg
b) Ajax
c) Vim
d) Zircon
7) The hero's name?
a) Ron
b) Brenda
c) Tharg
d) Tel
8) The adventure is complete and is, quite honestly, appalling. How are you going to get a good review?
a) Introduce the editors of the magazines to Mugger Marty your new public relations man who says "I am an ex-paratrooper and member of the SAS and don't like to see bad fings written about Firework products."
b) Offer it to one magazine only, telling it the game is an exclusive, bring it over in a suitcase with two armed guards to emphasise the effect.
c) Take several pages of advertising space
d) Send over Brian Blunter, a company minion, to the magazines to ask discreetly "Eh how much does it cost for a good review?"

d 5 Points. Never works, journalists never take money for good reviews. Free weekend in Paris, digital alarm clocks, small plastic promotional devices and food are, however, another matter.
9 a 0 Points. No. Mega games are never called Lunar Blast.
b 10 Points. You've obviously been in the business a while. . .
c 20 Points. This is it, you don't have to agree to anything and you get lunch. A winner.
d 10 Points. Sounds wise but you may have to put up with an irritating PR man in your office all afternoon.
e 5 Points. Not good. It might be good but, more to the point, what about that free launch?
10 a 0 Points. The screen shot is almost always either from a coin-op (256K, dedicated graphics chip, 32-bit processor) or an ST (they make this one first).
b 10 Points. That's right.
11 a 5 Points. Right idea but too enthusiastic.
b 20 Points. Has to be a winner, irreverant, irrelevant and mentions an old pop duo. .
c 15 Points. As above for references – except its a song – but too long.
d 0 Points. Only very very boring mags have titles like this.
12 a 20 Points. Actually having an Exclusive is far less important than seeming to have one. This should do it.
b 0 Points. No, magazines never help one another and they will just take this as a sign of weakness.
c 10 Points. Well, you'll save yourself a lot of time and worry and it probably won't make much difference.
d 0 Points. What are you, a complete dingbat?
13 a 10 Points. Absolutely old chap, a 'serious' machine. One is trying to educate after all.
b as above.
c as above.
d 0 Points. What are you trying to do, reflect the viewership.
14 a 10 Points. Yep, this is naff enough (c.f. Sunday Times).
b 10 Points. Also good. As colour supplements take such a long time to be organised you often find defunct computers are on offer as prizes.
c 10 Points. Semi-defunct software too.
d 0 Points. No. You don't give away anything anybody might want.
15 a 10 Points. Yep, this will do. Trite, dull, banal and with the exclamation mark at the end.
b 0 Points. This is similar to a line used by Amstrad. This will almost certainly involve some of the most expensive lawyers you've ever seen. . .
c 5 Points. Bit naff, and lacks that vital exclamation mark.
d 0 Points. Ho hum.
16 a 0 Points. No, aside from having extensive hair this man is clearly a mason. Sir Clive is a bald member of Mensa.
b 0 Points. No, you get something for nothing from Santa Claus. This man won't even give you a sensible joystick port.
c 20 Points. Yes its honest Al himself having a merry Christmas time and wishing you all a very merry Xmas time.
d 0 Points. No, an easy mistake to make but actually David Bowie has slightly high cheekbones and one pupil smaller than the other.

HOW DID YOU DO?

Add up your total number of points and check your industry rating below:
0 – 5
Oh dear, I'm afraid you have an awful lot to learn. You are so naive you probably still believe that one day people will learn to live together in perfect peace and harmony.
51 – 150
You're beginning to wise up about things but you have a long way to go. Reality is even worse than you are beginning to suspect.
151 – 300
You've been around, probably bought a few duff tapes, had your computer blow up a few times and been told a complete pack of lies in high street shops. Somehow through it all you stick with computers because, what the hell, they're a lot of fun aren't they?



YOU RUN A COMPUTER MAGAZINE . . .

9) A PR man rings you up and says "Listen, I wouldn't lie to you and you know you can trust me, Lunar Blast is going to be bigger than Elite." Do You:
a) Feel interested and offer him major coverage.
b) Think he's lieing and resolve not to trust him an inch.
c) Suggest he arranges a lunch at Maxims for you both to discuss it further.
d) Ask to see the game without committing yourself
e) Laugh hysterically
10) On the back of the cassette box is a brilliant screen shot which makes Lunar Blast look astonishing. Just below it in very, very small type it says "screen shot may be of a different version of game". Is it, in fact, a picture of the Spectrum version?
a) Yes
b) No
11) You are stuck with a boring feature on Icons that has to go in the mag. What headline do you give it?
a) Icon do that!
b) Icon Tina Turner
c) Icon see clearly now the rain has gone
d) Icon front end interfaces
12) You feature a three page colour special on a brand new mega game which you believe you have as an exclusive. Unfortunately you discover that your magazine's closest rival has, suffering from the same delusion, done the same thing. It comes out a day before you do. The PR people are laughing all the way to the bank. There is still some time. What do you do?
a) Relax and just make sure the word EXCLUSIVE is even bigger on your front cover.
b) Ring the other magazine and propose that since both of you have been deluded, both magazines drop the game.
c) Do nothing
d) Take out all reference to the word EXCLUSIVE in the piece.



THE MEDIA . . .

13) You are producing a TV program for micro owners what do you feature?
a) "an ordinary everyday BBC Micro"
b) "an ordinary micro – like this BBC for instance"
c) "your own micro – something like this BBC perhaps. ."
d) The Spectrum

14) The feature pages of a colour supplement run (it being seasonal) a feature on computers. If there was a competition as well what would be the prize?
a) A Vic20 complete with datacorder and software (Rat Maze 3K)
b) A Dragon 32
c) Ten copies of The Hobbit
d) Ten copies of StarGlider
15) You are an advertising copy writer (you thought up 'They're Explosive!' for Firework software) your current job is to prepare an ad for a game called Monster Mayhem. What does it say?
a) It's a monster!
b) Monster value
c) A game that bites
d) Quite a good not too expensive value-for-money game

PROFILE PERSONALITY

16) Study the picture: Who is the cheerful Christmas character?
a) Sir Clive Sinclair
b) Santa Claus
c) Alan Sugar
d) David Bowie



Who is this man?

THE ANSWERS

Bet it was easier than you thought for you to start thinking like a computer industry person. Here are the results with explanations:

1 a 0 Points. You obviously have a lot to learn, this response would only be appropriate if you were a journalist out to extract information. If you were a programmer forget it. . .

b 20 Points. This has to be the only rational response of a sensible persion.

c 0 Points. Hahahaha, what are you a government department or something?

d 10 Points. Nearly as good as *b* but more cowardly.

2 a 0 Points. Oh come on, the Oric was described as a powerful computer, the QL beat the IBM on spec etc etc. The first step is never to believe the ads.

b 10 Points. No, No, No. The people who work in the chain stores are not only biased in favour of the product they stock but are usually just plain wrong. Try asking how to connect the cheapo printer the store sells to the Spectrum and watch 'em squirm.

c 5 Points. Not a bad option, except that you probably won't end up buying anything at all. . .

d 20 Points. Yep, we'll tell you straight, except, of course, that since we only cover Sinclair material. . .

3 a 0 Points. Just try it brother, just wait for the little white letter.

b 0 Points. No, imagine the advertising copy "they go off with a fffrrrrrpppt".

c 0 Points. Sounds like a medical condition

d 20 Points. Good stuff. If you want to be particularly inventive you could even have a logo of an exploding sausage. Nifty eh?

4 a 0 Points. No. Sorry, but listen carefully, this is a big mistake – you will get great reviews and the program will get to the bottom of the charts. The younger kids won't buy it because they don't grasp concepts that aren't on TV or film, and you will never recoup your money and effort.

b 0 Points. Don't be silly, the 'people doing serious things with their computer are about ½ a % of the market. They're often doing fine things but spend about £12.57

c 20 Points. Yep, this is the one. Take a look around the most successful software houses. . . we want licencing deals. . .

d 5 Points. Well, you are a realist anyway. . .

5 a 5 Points. Well, names ending in 'ia always sound foreign. c.f. Transylvania but on this occasion. . .

b 0 Points. A dark land, all right, but lands in adventure games must have more than six letters.

c 10 Points. Always a good standby.

d 0 Points. Lacks a bit of threat don't you think?

6 a 10 Points. Always a good standby.

b 10 Points. Yes, household cleaning materials often provide good names for the incredibly unimaginative people who write adventure games.

c 5 Points. As above except that names of mystic orbs in adventure games have to have at least four letters.

d ? Points. Nah, sounds cheap and shoddy instead of mystically powerful.

7 a 0 Points. The writer would quite like to see an adventure hero with this name, but can't advise that you take a chance.

b 0 Points. The people who play adventures avidly are youths between 10 and 20 and they don't want to be a woman (mostly).

c 10 Points. Always a good standby.

d 15 Points. OK if your hero is a bit dodgy and from the East End but for powerful adventurers wielding mighty battle swords in long forgotten magical lands, forget it.

8 a 0 Points. Surprisingly this seldom works, usually the editor will cringe a bit and then write all about it when you've gone away.

b 20 Points. Never fails. And don't forget, you don't have to be telling the truth.

c 10 Points. Varies, sometimes successful if the mag desperately needs some ads. Can backfire as some magazines take pride in attacking the products of people who are contributing substabtially to their incomes.

BUDGET £1·99 £2·99 REVIEW

KINGS' KEEP

King Harold, my father, is heartless. Being cruel he terrorises his people into submission. Being completely nice, I'm incarcerated by my father in his keep.

This is obviously a budget game.

King's Keep could have been just another inferior **Spellbound** rip off. It has lots of rooms, objects to pick up, little menus that come down giving options and you jump around a lot. First impressions – very average graphics of the usual graphic adventure objects – were not favourable.

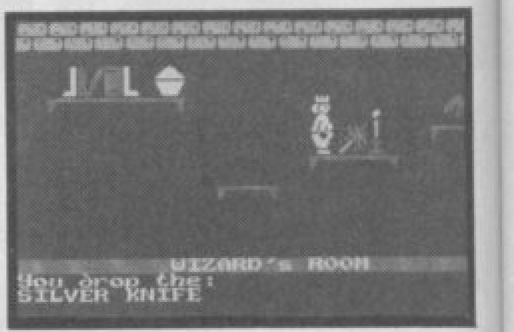
But then I tried to play it.

I haven't found a game quite as difficult to play as **King's Keep** in many, many moons.

The whole point of the game turns out to be not so much collect the objects and find out what to do with them as 'how on earth do I manage to jump, change direction in mid-air and successful land on a suspended platform without overshooting'.

The first screen nearly had me weeping – my hands ached from gripping the joystick, I couldn't see how you could get out but, in the tradition of such things there was just one way – it involves simultaneously jumping and then a fraction later completely changing direction. . .

King's Keep will test your jump technique to the limit but it's also a menu-driven 'use the objects' game.



If you make it past the first two screens you'll start to find objects and meet curious people. Using the *Talk* option on the menu will make the character reveal some sort of information – an object they'd like or whatever. Some key areas are marked *F* for forbidden and crossing their threshold means instant death – unless you have the right object in your possession. All the backgrounds are plain – bricks or craggy bits mostly, objects are simple looking though there

BLACK HAWK

Would it frighten you to know that the world's most advanced airborne killer is a set of user defined graphic Us?

The UDGs pop up at the beginning of the game as Black Hawk is suposed to near the enemy coast line. Seconds later, as the first enemy helicopters appear from the top of the jerkily scrolling screen, the UDGs transform into the aircraft.

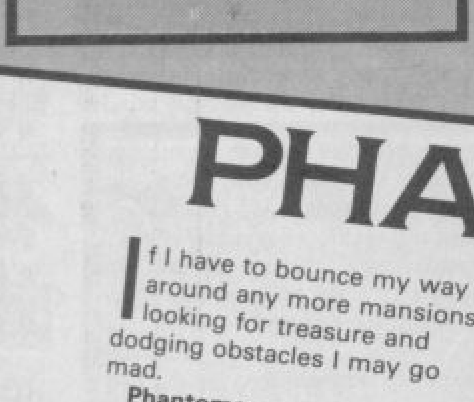
Once you're set up to play – all parts of the screen functioning as they should – you drift inland and destroy as many enemy guns, tanks and installations as you can using bullets and bombs.

The bullets are hardly visible, being white against blue or green backgrounds and the bombs have a mind of their own.

You get a percentage score for the number of direct hits you've made on ground-based installations and a points score for aircraft you knock out.

Many of the missions I found are almost unplayable because of the fire power of your opponents. Helicopters, gun implacem,ents and tanks can fire diagonally at you while your puny gun in the nose of Black Hawk, can only fire forward.

The glossy cover promises a lot and fails to deliver■



FACTS BOX

This used to be a full price game! It was so hopeless then that even now it's out on budget it still can't cut it

BLACK HAWK
Label: Sparklers
Price: £1.99
Memory: 48K/128K
Joystick: various

Reviewer: John Gilbert

★★★★★

PHANTOMAS

If I have to bounce my way around any more mansions looking for treasure and dodging obstacles I may go mad.

Phantomas, one of the first releases from Codemasters, a whole new software label, has finally sent me over the edge. . .

Screen after screen of funny (ie not funny) shaped objects hopping backwards and forwards, objects you need to collect that flash, things that must be jumped over. It goes on. . .

I can't stand many more cute characters either. This one like an orange with feet and a beret leaps around unpredictably, the way the jump button is pressed seemingly having little relationship to the height of the jump.

I tired too of backgrounds constructed of featureless bricks and steps that don't have any function because you can



jump over them.

There is, I suppose, something to be said for the sheer volume of material in the game, there are screens and screens of it. Three sections: one is a sort of junkyard of odd vehicles and rockets, the next is the palace and then there's the underground world.

Eighty different rooms it says on the front of the box, proudly. Well, different is stretching a point a bit. It's more a case that the silly sprites all come in various guises. . .

In an attempt to be generous this is a budget offering and it could be a good buy for Mr A J Twagget of 34 Elsmore Gardens, Rhyll (Mad Celt country) who has never heard of **Manic Miner.** Other computer owners are unlikely to need it■

FACTS BOX

Another sub-Manic Miner budget bounce 'em up. No real original thought has been put into it but it's huge.

PHANTOMAS
Label: Code Masters
Author: Enrigue Cervera
Price: £1.99
Memory: 48K/128K
Joysticks: various

Reviewer: Graham Taylor

★☆☆☆☆

ALIEN



Alien is in no way to be confused with Aliens, the new game from Electric Dreams. Alien first emerged from the depths of Argus Press way back in 1984. Based on the exploits of the crew of the ill-fated Nostromo spacecraft, the game, though was panned by some reviewers was generally quite well-liked.

It's now been re-released as a budget game. Obviously, Argus (pretending to be Bug-Byte) has in no way engineered the release date to co-incide with movie/game promotions of Aliens, but I dare say it's possible to conceive the odd sale being picked up this way.

The game is much happier as a budget title. At full price, the product promised too much. No matter how hard you try, it's very, very difficult to promote a computer game as being genuinely scary. The harder Argus tried, the more ridiculous things got: "Warning: Do not play this in the dark."

In fact, despite some ropey abbreviations allowing words to fit on the screen (Incineratr) and some iffy graphics, it isn't too bad. You take the role of a member of the crew, Lambert,

are some nice plants here and there. . . No prizes for graphics though.

If you regard **King's Keep** as the ultimate jumping challenge you'll love it.

One of the best budget titles from Firebird for a long time but definitely not for novices■

FACTS BOX

Visually unexciting but fiendishly difficult mixture of Manic Miner and Spellbound. Really devious – a real challenge

KING'S KEEP
Label: Firebird
Author: Ian Wright
Price: £1.99
Memory: 48K/128K
Joysticks: Kempston

Reviewer: Graham Taylor

★★★★★



Kane, Ash, Dallas, Parker, Ripley or Brett, in a desperate bid to rescue your spaceship from the altogether beastly alien.

As the game goes on, messages will pop up on the screen, telling you that something exciting has just happened elsewhere (Ripley sees Jones the cat).

The basic idea is to track the alien through the ducts, and blow it away by whatever means are most efficient. Blowing up the ship is quite a safe bet, but everyone gets killed, and since you die you lose a few points on the competence rating.

Alien is claimed to feature a unique personality control system. What this means is, in fact, that other characters will get a bit stroppy if you leave them to defend themselves. The more upset they get, the less likely they are to agree to one of your more lame-brained ideas■

FACTS BOX

Alien is a reasonable game, a good budget bet, and is more suspense-orientated – like the first film

ALIEN
Label: Bug-Byte
Author: Paul Clansey
Price: £2.99
Memory: 48K/128K
Joystick: various

Reviewer: Jim Douglas

★★★☆☆

TERRA COGNITA

BUDGET £1·99 £2·99 REVIEW

Now this is what I like. Terra Cognita **is the perfect budget game – a simple idea nicely presented.**

Mind you it's not suprising this is a very slick looking game – it's by NonTerraqueous **programmer Stephen Curtis.**

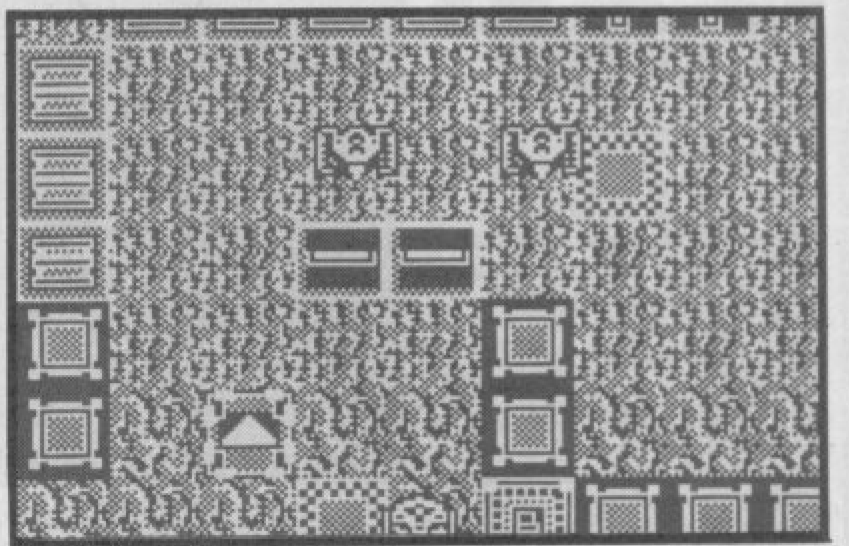
What it is, if it must be compared to anything, is a two-colour version of Lightforce **mixed with elements of** Uridium **– not quite as good, maybe, but at £1.99.**

Do you need a plot for this sort of thing? OK, then you are trying to pilot your ship over 100 smoothly scrolling screens to meet up with a mothership. Getting over those 100 screens will take a long time.

There are, of course, vast numbers of alien spaceships which come wizzing across the screen. At first they are easy to polish off but gradually things start to get tricky. That's the Lightforce **bit – that and the style of the graphics.**

The Uridium **part comes with the fact that there are vast areas of block – like buildings on the planet's surface which you have to steer your way around. Gradually that becomes more and more difficult – sometimes it's almost (but not quite) impossible to get from one side of the screen to the other in time. . .**

There are other features too, refuel squares, extra squares and, perhaps worst of all the



time warp squares which send you right back to the beginning of the game. There are squares to slow you, squares which speed you up and you need to work out when to use both to get through some sections of the game.

The mix of extremely fast arcade action with the strong element of thought and planning make for a stunning game.

Terra Cognita is more entertaining and better programmed than most games at full price, yet it's a budget offering.

And it's by far the best of the new Spectrum releases from Code Masters■

FACTS BOX

Superb arcade game with near Lightforce quality graphics and a lot of good ideas. A real test of your joystick control

TERRA COGNITA
Label: Code Masters
Author: Stephen Curtis
Price: £1.99
Memory: 48K/128K
Joysticks: various

Reviewer: Graham Taylor

★★★★★

HERCULES

Hercules looks absolutely awful. It isn't. Quite.

I wouldn't go as far as some other magazines and say that **Hercules** is a great game that just looks like a terrible one but certainly it has some unusual features.

It looks like a platforms and ladders game, the plot is based on the twelve labours of Hercules as divided over fifty screens. For those who don't know about the twelve labours worry not, somehow they are all reduced to running and jumping around and dodging funny objects. But that's not all.

What makes **Hercules** something a little more than a runny jumpy game with terrible graphics is the overall structure of each screen. It isn't merely a matter of jumping this, dodging that, taking this route or whatever, you find that over time things happen – previously



safe platforms turn into fire – other platforms look safe but turn to fire the moment you step on them, sometimes you don't even know where the platforms are. . . This adds a different dimension to the game and gets it a few brownie points (a star's worth I guess).

I would still say that a) the graphics on **Hercules** are unspeakably bad b) some of the 'will it burst into flames? element' is simply unfair at least first time around – no amount of skill, dexterity or judgement will help you solve it and it's just luck.

I wouldn't go so far as to recommend this one even at a budget price but if you are an addict of the platforms and ladders genre and fancy something a bit unusual this could be of interest■

FACTS BOX

Not quite a boring platform and ladders game with terrible graphics. Some neat twists earn it a few extra points

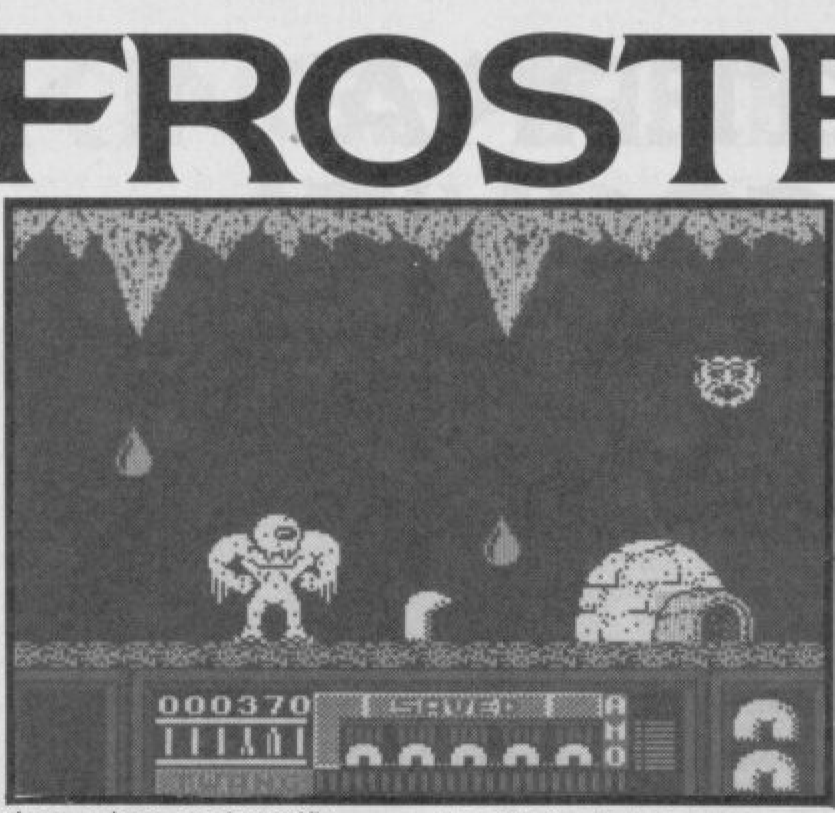
HERCULES
Label: Alpha Omega
Author: In house
Price: £1.99
Memory: 48K/128K
Joystick: various

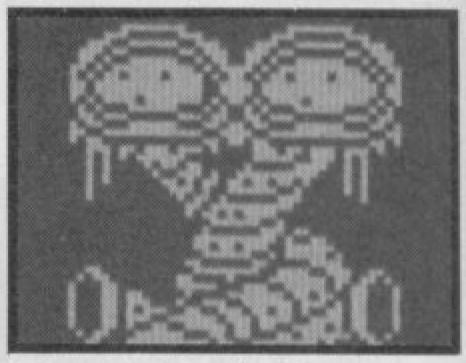
Reviewer: Graham Taylor

★★☆☆☆

ARCADE REVIEW

FROSTBITE





Well, I dunno. What has Mikro Gen been doing other than redesigning its logo?

Frostbite is part of the answer but it's hardly a mammoth (snow joke, geddit?) offering.

I don't know how many games this reminds me of, **Manic Miner** for one, **Starstrike** for another, **Underwurlde** (I could go on). It's getting through the caverns time again, judging the timing to get you past endless obstacles that drip, bounce or otherwise travel into you. You can fire at some of them, others need specific weapons scattered around. There is a lot of jumping in this game, both unassisted and with the aid of various bounce platforms strategically placed around the caverns.

You are a curious object that looks and moves just like a slinky (remember them?) – a sort of spring that tumbles over and over and thereby moves. The way you move is unusual and consequently some of the strategies involved in the game are a little different. The combination of jumping and moving, for example, takes a while to work out.

The object is to get out, simple, really. Useful objects include various coloured sweets that control things like jump height and speed and what look like air-to-air missiles. I'm all for high tech violence personally.

Where does that title come from? Not a clue. Although clearly the caverns are supposed to look icy there is no other arctic, polar, or otherwise nippy feature in the game. Oh well.

The sprites are big. That's good but, though some care has been taken with attributes, Mikro-Gen remains true to its **Wally** traditions and objects change colour with gleeful abandon.

As a game it looks OK. There are some impressive monsters in some of the caves (although mostly the big ones don't do anything at all) and the problems (timing the jumps) are difficult but not quite impossible which I guess is about right.

Nothing special. There isn't any astounding programming or stunningly original ideas to be found – but fun to play anyway.

FACTS BOX

Moderately entertaining 'negotiate the caverns' game with some original features. Old ideas, but neatly done

FROSTBITE
Label: Mikro Gen
Author: in-house
Price: £9.95
Memory: 48K/128K
Joystick: various

Reviewer: Graham Taylor

★★★★☆

HIGHLANDER

'There can be only one' says the cassette inlay but the game of **Highlander**, sadly just ain't it.

It's all been loosely based around the patchy movie in which Conner MacCleod has to kill all his brother immortals to win a mysterious prize – which in the film turns out to be fertility. And the mode of execution? Nothing less than blood-squirting decapitation.

In the three-part game you train as an expert Samuri swords player before you can despatch your opponent and take your just rewards. There are three game *Loads* the difference being a new background is loaded as a *Screens* and a new opponent.

Only the top third of the backdrop contains an illustration and the rest of the screen is kept black to avoid colour clash with the main figures which one big (about half-**Dark Sceptre** size) and well animated.

Your first opponent is Ramirez. He's a Spanish gay blade and, as your teacher, he knows he's unlikely to survive.

FACTS BOX

No prizes here. Ocean probably paid big bucks for the license and has ended up with a golden turkey

HIGHLANDER
Label: Ocean
Author: Canvas
Price: £7.95
Memory: 48K/128K
Joystick: various

Reviewer: John Gilbert

★★☆☆☆

You get a sword-play hint sheet but it turns out to be next to useless once you start to play. The basic move is duck, joystick down, and perhaps advance, joystick left.

Highlander is all about energy and, in the film, when you win a fight you take on the life force of the vanquished. It's not a fact which has been assimilated by the programmers. If you kill your quary his blood – and little else – spurts all over you after his head's toll off – screen with a unique splatter sound effect which can only be found on the Spectrum.

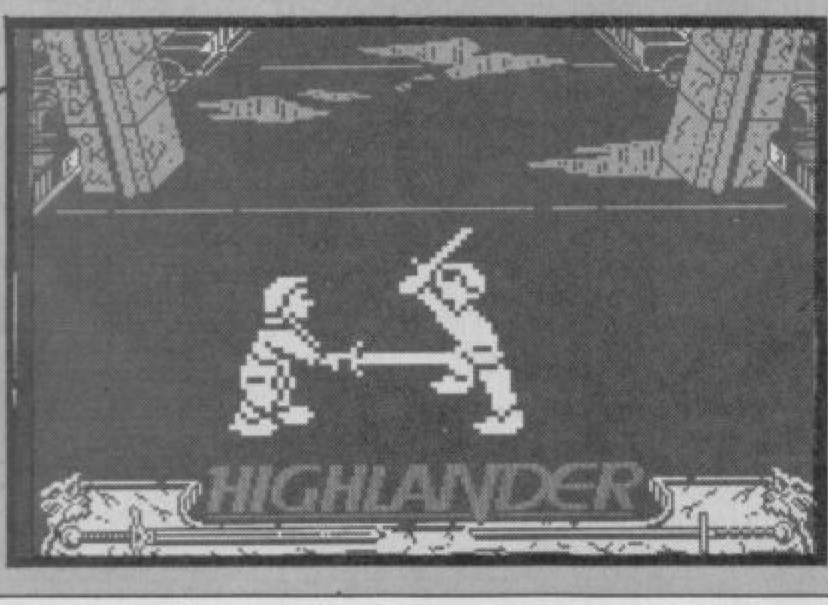
You can tell you're losing when MacCleod sits down on the job and refuses to get up. Shortly after your energy slips into the red sector – not good.

Kill Ramirez with a dazzling display of attack, timing and position and your move on to the next background, in modern day New York. He's a shady character called Fizir. Here the game and film part company. MacCleod does battle a Saracen at the beginning of the film but his name's Fasil, not Fizir.

Yet more attacking play and you're through to the final conflict between you and the evilsome Kurgen.

It was here I was defeated. The third battle is very difficult to win, and you'd think the challenge would make a good game. You'd be wrong. The three parts to the game are virtually identical and I was losing interest long before I got to the third part.

And there's almost no technique or finesse required in the fighting. Relentlessly slam the joystick and keep on till you win. Let up for a second and you're dead. So's the game ■



CAN THIS BE REAL?

Fly an aircraft, race around the world's most dangerous Grand Prix circuits or take a steam locomotive from London to Brighton. Just as your Spectrum can take you into the depths of space to zap aliens so it can simulate most audio visual real-life events you can mention. This month SU straps itself into the world of Spectrum simulators. Here's our choices:

AIR TRAFFIC CONTROL

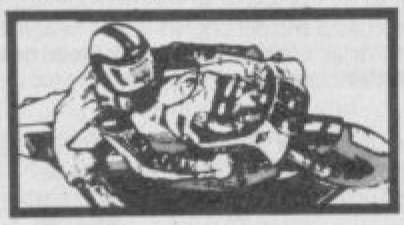
Take over control of two of the worlds major airport; London Heathrow and Schiphol Amsterdam. The screen display may look docile but you're in the hot seat from which the landing instructions for a host of jumbos and light aircraft are issued.

You're not in the pilots seat this time but make just one slip in stacking those aircraft before landing and you could have a major disaster on your hands. Fortunately, the game has eight play options which help you to train in your new job.

The most simple options include Basic Vectoring where you must guide a selection of aircraft onto your strip, while the most difficult include emergency landings and stacking. If none of those seem easy the author, who also wrote Nightflite II and is an air traffic controller at Heathrow, has included a demonstration which shows how the screen is layed out and the types of command you need to know.

Like many computer simulations it's not graphically impressive but it's the most powerful and authentic simulator of the lot.

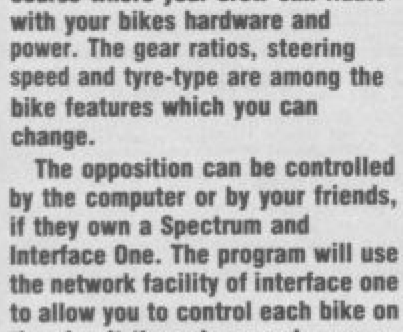
Label: *Hewson* Price: *£9.95* Memory: *48K/128K*



TT RACER

Here's a real meaty motorbike simulation for addicts, which has more features than the budget Full Throttle but is more difficult to play.

Again, you ride a Grand Prix bike but there are 12 international circuits and 15 other riders with whom you must compete. Your machine has throttle, clutch, gear and brake features all of which need constant attention as you wheel around the bends of circuits such as Silverstone, Hockenheim and Anderstorp. Just as the bike performs to life-like standards the straights and bends of each course have been accurately plotted by the author.



You have a pit stop on each course where your crew can fiddle with your bikes hardware and power. The gear ratios, steering speed and tyre-type are among the bike features which you can change.

The opposition can be controlled by the computer or by your friends, if they own a Spectrum and Interface One. The program will use the network facility of interface one to allow you to control each bike on the circuit through several Spectrums.

TT Racer is by far the best of the bike racing games.

Label: *Digital Integration* Price: *£9.95* Memory: *48K/128K* Joystick: *Various*

Fighter Pilot

Regarded by many as the ultimate Spectrum flight simulator and, indeed, it has a host of impressive features.

The aircraft is modelled on the US Airforce's F15 fighter bomber which you must take through an air to air battle simulation. Graphics are wireframe – like those of StarGlider – but the lack of detail on enemy aircraft and geographic features is made up for in a corresponding smoothness and speed in the graphic movement.

It's not all battle, however. The cassette inlay gives instructions for performing aerobatics. Diagrams show how your F15 should react when you move the controls in a certain way.

Fighter Pilot scores for speed over Hewson's Nightflite II and just beats Psion's Flight Simulator for entertainment value. It was written by Dave Marshall who has designed software for large scale flight simulators used by companies such as British Aerospace and Britannia Airway's for their training programmes.

Label: *Digital Integration* Price: *£7.95* Memory: *48K/128K* Joystick: *Various*

TOMAHAWK

The most complex and satisfying helicopter simulation on the Spectrum. You take control of a US Airforce Apache helicopter. It's a modern model, designed to fly low through a 3D landscape of trees, mountains, high buildings and electricity pylons.

The complex console display has been copied straight from the real McCoy so, you'll need to do all the swatting up required of a trainee pilot. You are, of course, at war but have a complex weapons' system at your disposal to destroy the tanks and missiles which attempt to knock you from the skies.

The Spectrum version of the helicopter has eight Hellfire missiles, two rocket pods and a cannon, compared to the real Apache's 16 rockets 19-round pods and cannon. However, a helipad will always be at hand for you to stock up with more. Rockets can be aimed manually or targetted by the computers and you've also got infra-red camera equipment to help track targets during night.

The aim is to take out as many of the enemy's positions as possible but just flying the copter is a fascinating experience.

Label: *Digital Integration* Price: *£9.95* Memory: *48K/128K* Joystick: *Various*

STRIKE FORCE HARRIER

The Hawker Harrier jump jet was brought into action during the Falklands war and it is on this island with its extremes of landscape and treacherous climate that Strike Force Harrier is set.

Your objective is to destroy the enemy base, situated 250 miles over land. First you've got to get there and flying a Harrier is no easy job. You'll need to take the aircraft up many times before you get the hang of the instrument panels and the controls which were designed for contortionist but can be user-defined.

Once you've got the hang of your Harrier you can take off over the mountainous terrain, some of which is snow covered. The multi-purpose window at the bottom left of the screen will tell you if you're in mechanical trouble or you're about to crash, the FOFTRAC will track enemy aircraft but you're on your own when it comes to finding the enemy base. There's no full blown map for you to swat up so, like a real pilot, you'll have to rely on your flying skills.

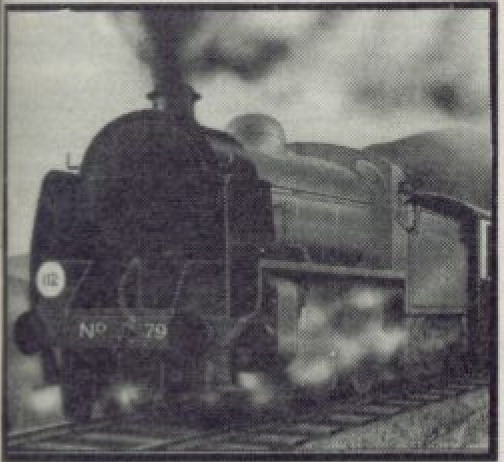
The excellent flight manual takes you through the hardware details of your Harrier, how to get it up in the air, how it performs once it's up there and how to perform the various defensive and attacking manouevres to best effect. There's even a guide to the evasion of SAM and AAM missile attacks.

Harrier is simply the best war zone simulation I have seen.

Label: *Mirrorsoft* Price: *£9.95* Memory: *48K/128K* Joystick: *Various*



SIMULATIONS SURVEY



SOUTHERN BELLE

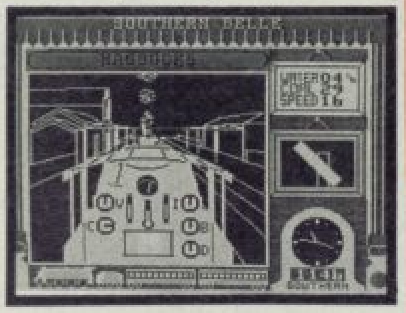
The Victoria to Brighton line has always been a firm favourite with steam railway enthusiasts and, at the beginning of '86, Hewson capitalised on a large minority's infatuation with trains with the launch of Southern Belle

You take the dual roles of Driver and fireman on the train through the 50 mile run and six levels of legitimate play.

Pressing the *Enter* key gives you that famous high speed run through an authentically depicted track layout. All the major features and atmosphere of the country side and small village stations are depicted. The bridges are actually drawn and even the sharp turns are realistic.

Each of the six main levels has a different schedule. Easy schedules include speed limits with stops at some stations – making it difficult to keep to your time table – while the higher level schedules stop the train at every stop and pose built-in problems such as making a record-breaking run.

Your trips to Brighton are



evaluated by the computer and a score totted up at the end of the journey which takes account time keeping at stations, speed and whether you've kept the steam in good nick. You can do all the usual things, like blowing the whistle, stoking the fire and slamming on the brakes but you should watch out for the error messages such as Unsafe Reversing or Train Derailed. Think of the passengers.

Okay, so you're not exactly in a joystick controlled driving seat for this one, but this stoking and shunting simulation will take you back to the good old days.

Label: *Hewson* **Price:** *£7.95* **Memory:** *48K/128K*

★COMPETITION★

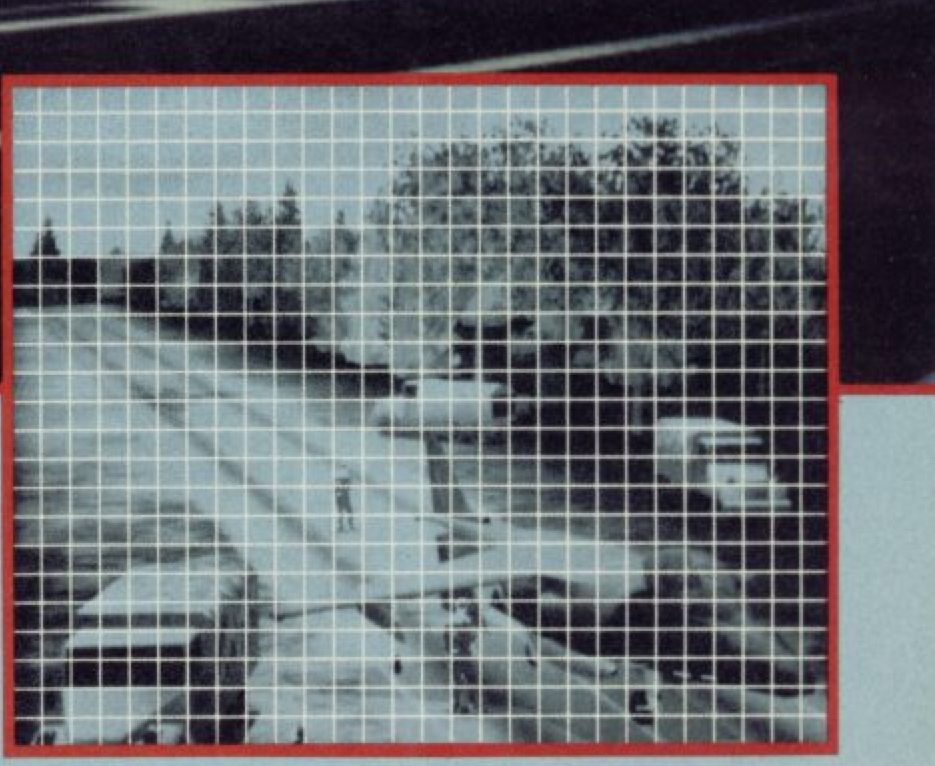
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Competition

So here's what you have to do:
Remember those spot the ball competitions in the newspapers where you had to guess from the faces of the players where the ball was? This is like that. Take a look at this action shot carefully retouched so that something is missing i.e. the fighter that's about to land. Where's it gone? Put a tick in the grid square where you think the enemy ought to be. If you get it right you go into the large brown sack from which the winners will be drawn

Cut out this coupon, complete with the picture above with your tick on it and send it to: Top Gun Compo, Sinclair User, 30-32 Farringdon Lane, London, EC1R 3AU. Closing date for the competition is February 9 1987. High flyers from EMAP, British Aerospace or Ocean need not apply.

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Screen shots taken from various computer formats.
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THEY STOLE A MILLION

ARCADE REVIEW

Ever wondered how they'd turn a caper movie into a game? **They Stole a Million** from Ariolasoft is how.

They Stole a Million, on the face of it, is a highly original strategy game in two parts: Part 1 ia all about planning, Part 2 is the perps (perpetrators) in action against your clock.

So far so good. The snag is, despite its obvious originality, the game lacks pace. In fact it's a bit boring. Selecting icons from the menu and setting the timings for each move of each of your team is difficult, sure. But after a while it's also tediously repetitive.

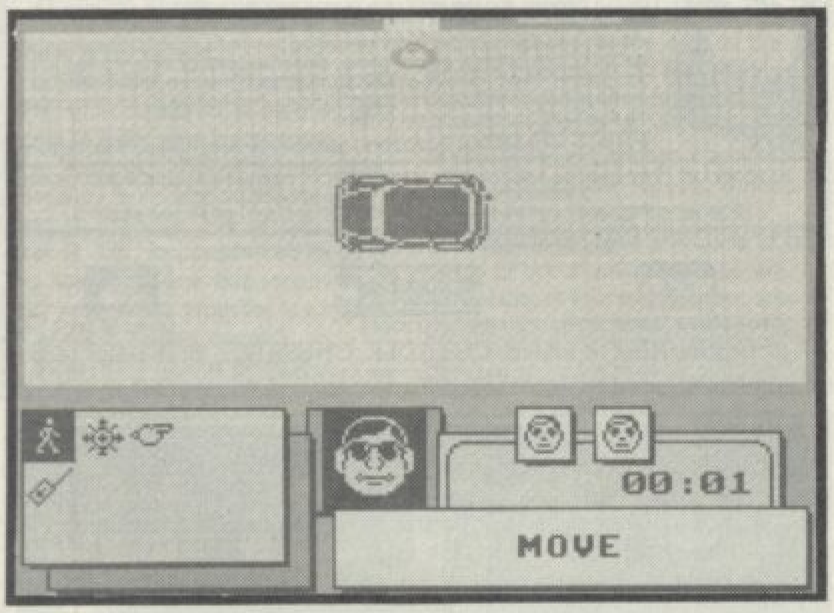
And Part 2 isn't really any more satisfactory. It cried out for really good graphics and fast action as the heist is carried out, but it has none of these things. I fear **They Stole a Million** will have all but the most committed strategy game player yawning after only a few heists.

You're a small scale thief, despite your ambitions to be a big Boss, so you should pick your target carefully. There are banks to rob and jewellery stores to smash but, when you're a beginner, go for easy pickings such as the coin shop. Each target also has a different security system. For instance, the coin shop has a sturdy lock on the front door – you'll need the locksmith – whole inside the safe and three display cases are wired. So, you'll need at least a three – strong team.

There's quite a choice of petty crooks on offer for your team. There are safe breakers, people who have turned their legit electrical training to more lucrative ends, and wheelmen who are hooked in the fast lane. OK. To make your plan work you'll need a balanced team made up of three or four villains.

Once you've picked your target and team, now's the chance to develop your time plan. Load in the second part of the program and the exterior of the target premises is shown. It's a simple map just a few lines describing buildings and pavement and a number one, set in a square in the road. That's your first team member. Using the system's icons, at the bottom of the screen, move Number 1 through his paces. Then do the same for No 2, No3 and so on. The general plan of action is the same for most of the robberys: get into the premises without tripping alarms, smash the cases, bust into the safe, grab the loot and scarper. Every action is timed and the computer calculates the amount of time your plan would take. You can't slow down this digital clock but you can add seconds to it so your team pauses, thinks, and doesn't make any mistakes in a rush. The clock timing makes your plan more difficult because each team member must perform their tasks without getting in each other's ways. Take a note of when Detonator D'Arcy does his stuff or Skeleton Joe could get written off if he's in the wrong place at the wrong time.

Yet, a little more attention to on-screen detail and some tightening of the gameplay and **They Stole a Million** could have switched from interesting-but-unsatisfying to brilliant. A big pity■



FACTS BOX

Highly original idea spoilt. Monotony at the planning stage turns into tedium at the denoument. A pity

THEY STOLE A MILLION
Label: Ariolasoft
Price: £8.95
Memory: 48K/128K

Reviewer: John Gilbert

★★★★☆

FAT WORM BLOWS A SPARKY

"Well crucial, man" is how Durell Software describes Fat Worm Blows a Sparky.

You, as the worm in the title travel the inside of a Spectrum, collecting spindles and avoiding creepers, sputniks and sparkies.

The screen has a 'status' display in the lower portion, giving you an indication of how much energy you have left, score, hi-score etc. The remainder of your screen shows the world in which Wormie can travel. It's a plan view, pretending to be three-dimensional.

You're looking for a disc drive, but as you do so bugs swarm around and do unfriendly things to you. In an attempt to de-bug (ha, ha, ha) the system, you can shoot the various aliens. Like Durell says, it's well crucial man.

Screen movement is reasonably pleasant but the real disappointment is the worm itself. It looks uncomfortably similar to a couple of triangles, stuck together by a black line. The Spindles rotate better.

The gameplay is pacey – things keep strolling along in their own time and Wormie can almost be described as achieving a decent lick in some places.■

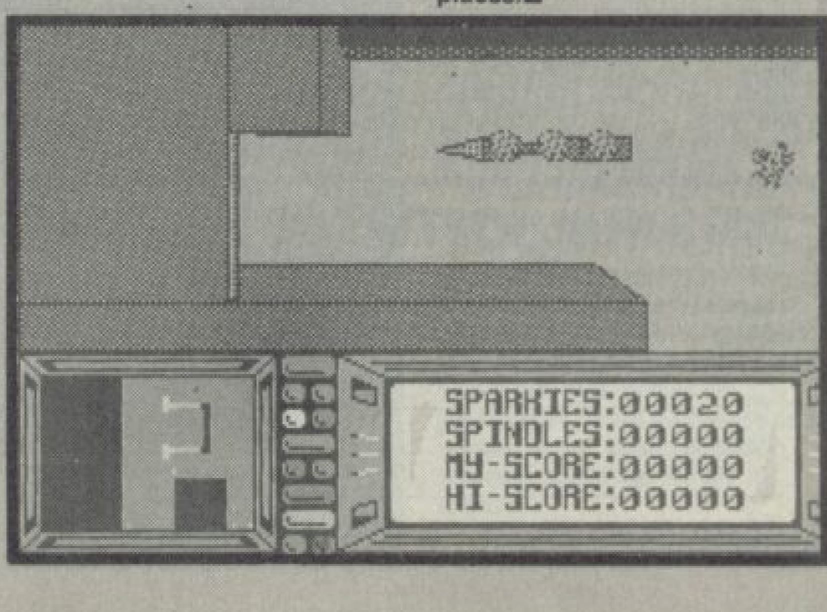
FACTS BOX

An original looking game, with a dubious storyline and an inflated price. Could have made a good budget title

FAT WORM BLOWS A SPARKY
Label: Durell
Price: £9.95
Joystick: Various
Memory: 48K/128K

Reviewer: Jim Douglas

★★★☆☆

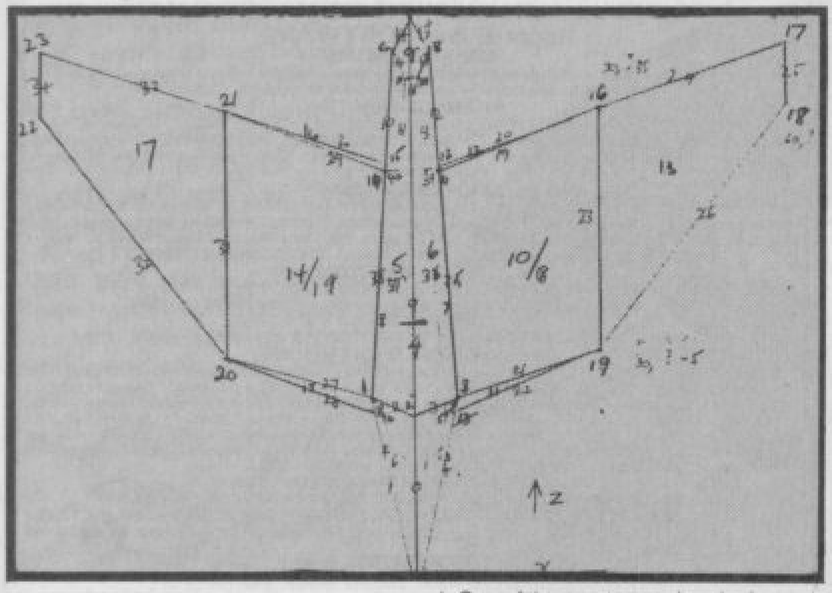


BACKGROUND NOISE

Background Noise looks behind the top games of the moment and speaks to the programmers who sweated blood to produce them. Background Noise looks from the author's point of view — at the particular programming problems and the way they were solved

STARGLIDER

Team leader Paul Hibbard



▲ One of the most complex designs at the original design stage.

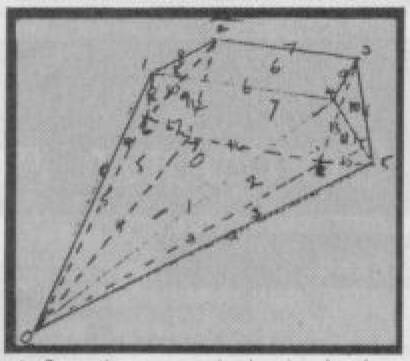
As Development Manager it was my task to ensure that the Spectrum version of *StarGlider* retained the feel of the Atari ST original.

***StarGlider* was designed to use the power and memory of the Atari ST. To convert the program to the Spectrum presented many problems which I had feared might be insurmountable but which, in the event, were solved.**

In itself the move from the power of a 16 bit computer to an 8 bit may seem to have only tremendous disadvantages. The Spectrum does, however, have some advantages over an Atari ST. The screen of the Atari is 32K, in comparison to 8K of the Spectrum, and this means that less work in the program is required to address screen memory.

As in most recent programs *StarGlider* uses a dummy screen area on which all the work is done before being transferred to the real screen. On the ST this can be done by telling the hardware to point to a new area of memory for the screen. The Spectrum does not have the luxury of 'screen flipping' and must rely on a piece of machine code to dump the dummy area to screen memory.

Another constraint in the Spectrum was the memory size. The ST version was only restricted by disc space, which was about 400K compared to the Spectrums meagre 48K. The memory problem was overcome by taking out some aspects that the Spectrum could not cover such as digitised music (80K), digitised speech (32K), and a reappearance of the loading screen (32K). As I have already mentioned the difference in the size of the screen memory is an important feature and this means that it was possible to save at least 24K in the Spectrum when storing the control panel and missile screen. Other memory was saved by careful changes in the data structure of the maps of the *StarGlider* world which was reduced in a manner that would not be obvious to anyone except a mapping freak.



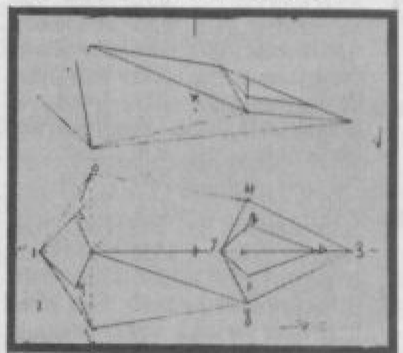
▲ Sometimes seemingly simply shapes proved complex to define

▼ The Silo launcher which rotates and seems to 'launch' missiles

It was necessary to remove certain elements from the Spectrum 48K, version although I was pleased that some of these were retained in the 128K version. The 128K does include the same digitised speech as the ST but using a slightly different sample rate. The speech was in fact originally sampled on an Amiga and this was used in both the versions. It took a long time to record the speech to get clear samples and everyone in the office had a go to see whose voice sounded best. In the end Clare Edgeley had to suffer the embarrassment of repeatedly saying earth shaking phrases such as 'docking complete' and 'missile launched'. Clare had to repeat these phrases so many times that she became brainwashed and now still says them in the middle of ordinary conversation.

It was not possible to use the original digitised music but Dave Lowe, programmed three part music for the 128K.

One of the most significant features of *Starglider* is the animated vector graphics. To get the animation it was necessary to design the basic object with its coordinates for each point and then work out new coordinates for any moving points for each frame of animation. A new drawing for each frame was required so that each point could, be calculated in relation to the centre of the object. The StarGlider itself had 23 points and required 22 frames of animation which gives an indication of the amount of work that was required.



▲ Geometric shapes at the heart of tighter design

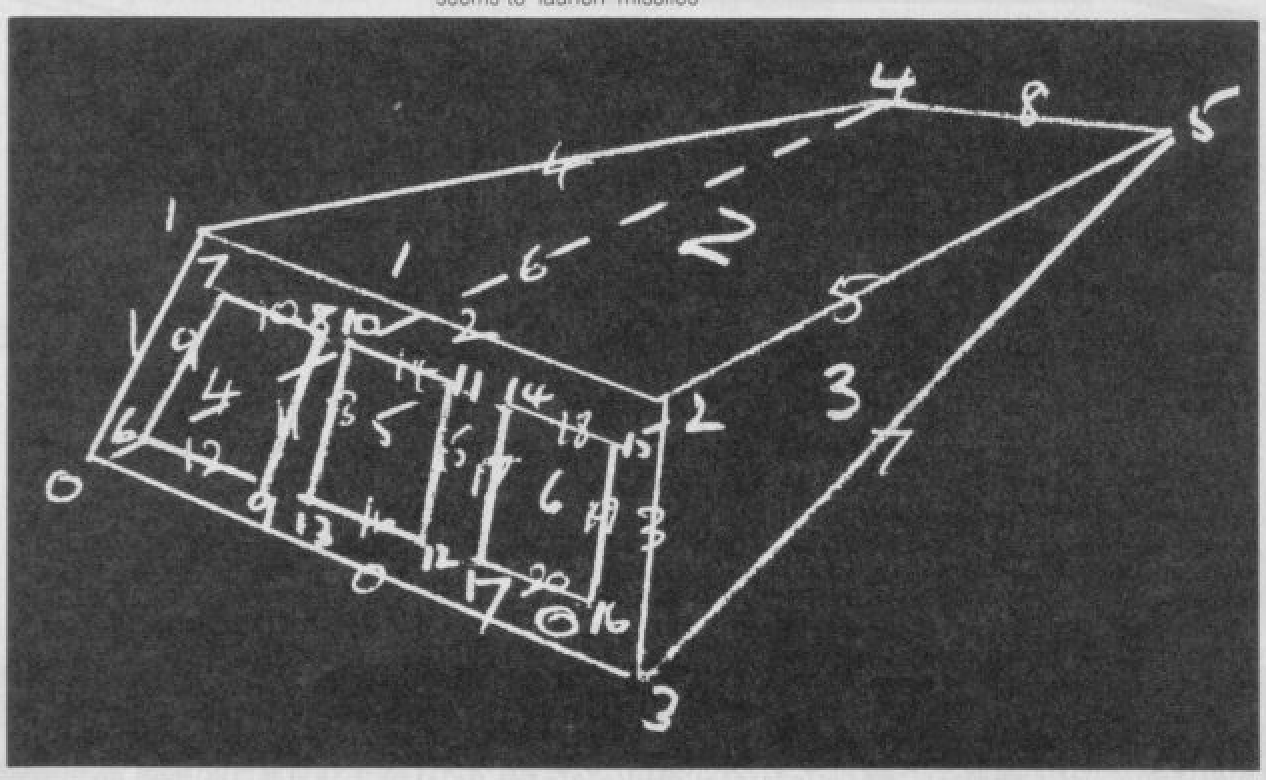
When designing the objects it was very important to give consideration to the number of points used as they all require calculation by the program each time the object is redrawn on every new frame of the screen. It is, however, surprising that some of the more complicated looking objects can have fewer points simply by using a sneaky design.

Another significant consideration vital to 3D games is how something appears to the eye rather than what may be considered to be mathematically correct. Various tricks are used in *StarGlinder* to give the impression of depth. Possibly the most obvious (well it will be now) is the control panel. There had been so many games with spaceship panels looking flat I decided to use a false perspective to give a feeling of depth. After filling my waste bin with various designs I finished up with the one now used in all versions. I was especially pleased with the way it gives the impression that the scanner slopes into the screen.

A constant feature of the programming was devising tricks to minimise use of memory space. Swapping bits of graphics not required on screen into a buffer, with careful planning, can condense the memory requirements. At other times the same buffer can be used to expand compressed data.

Another technique was to use self modifying code. This is useful if you have a long pice of code that with small changes would serve as another routine. A short piece of code is written to poke the routine to change how it operates. I hasten to add that this method of programming is not for the novice or nervous and is totally against standard teachings. We did it anyway.

Paul Hibbard



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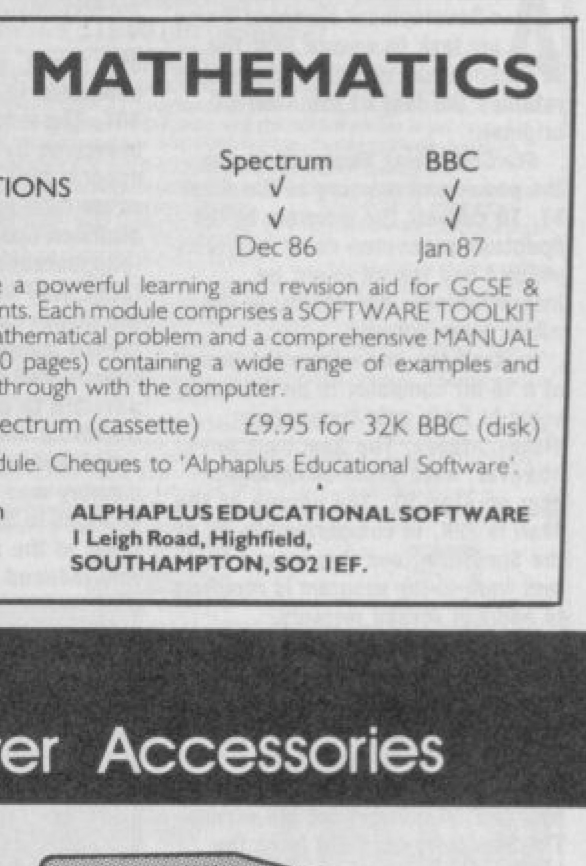
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STRATEGY SIMULATION REVIEW

SINCLAIR USER CLASSIC

SAMURAI

You might think that I review games because I get paid for it, but it's not true (well, almost). Really I do it for love – waiting for a game like Samurai to appear. Something like this just makes it all worth while.

Need some background? Right, here it is in a nutshell. You control a force of Japanese warriors. You have to attack a temple and kill all the warrior monks who are defending it.

And that's basically it – simple, clean and fast.

To begin with, you have to pick your forces. Depending on the difficulty level, you have from 200 to 400 points to spend. Mounted Samurai cost 40 points, Ninja (assassins) cost 25 points, a unit of Ashigaru (second rank foot soldiers) 18 points, and a Samurai 12 points. You are free to choose whatever mix you like, so long as you don't exceed the points you are allowed.

Your opponent, the computer, has a force of monks, trained in martial arts and wielding two-handed swords: Samurai monks, apparently regarded as the top warriors of Imperial Japan, and young Samurai monks still in training.

You choose your forces by selecting from a range of icons. Move the joystick until the icon you want flashes, hit fire and a unit with that icon on appears in the playing area window which takes up about a third of the screen.

When you're satisfied with the make-up of your forces, then you can start the game. As far as I can work out, there is only one map – but what a map! It's one of the best pieces of static graphics I have ever seen on the Spectrum – in fact, to be honest, on just about any computer including the Atari ST and Amiga.



▲ Foot fighters and mounted troops do battle

You see, in the map window, an aerial view of a Japanese temple and the land immediately surrounding it. Everything is perfect – grass, paving stones, chairs, statues, water, wooden planking: someone has taken an immense amount of effort on this.

Dotted about the map are the various warriors under your command, and centred on the temple – which is in the middle of the map – are the enemy forces. Warriors appear as square counters with the icon showing what they are on them. Yours are orange, the enemy's are blue.

The computer automatically cycles through your units. When it centres on one, you have to move the joystick until the icon you want is flashing, then hit fire. So if you choose the icon that looks like a pair of feet, that represents movement: you then move the flashing on-screen cursor to where you want your man to go. To the right of the map window is a status screen, which indicates how many movement points he has left, and how strong he is. Strength starts at about 30, and when a soldier reaches one he is dead and removed from the map.

To attack, you move a unit next to an enemy force. Then, when you've moved everybody you want to, combat takes place. Everybody adjacent to an enemy attacks and is attacked by that enemy.

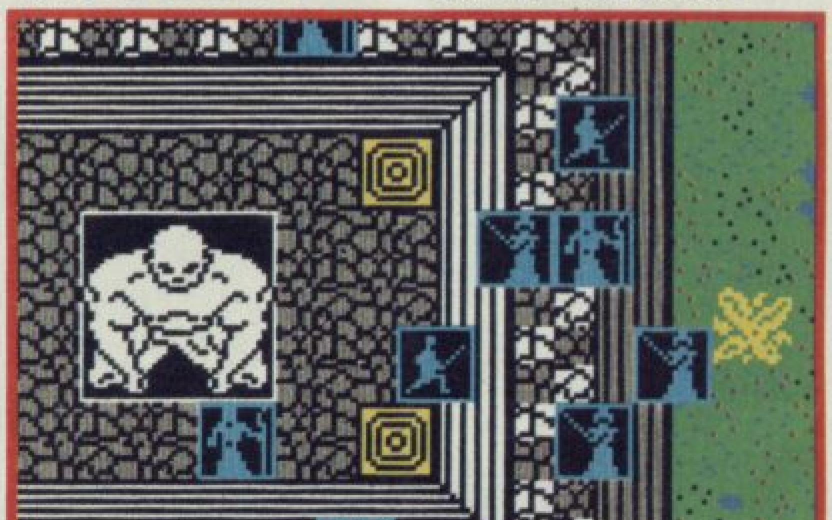
The only exception to this rule is the Ninja, who can engage in ranged combat. Choose the icon representing a Bhuriken, or throwing star, and press fire; to the right of the map window you see a circle with a white line. Use the joystick or cursor controls to move the line until it's pointing in the direction you want to throw your star, then hit fire again. If you are close enough, then you have a good chance of hitting. Once a Ninja has thrown his star for that turn, he still has some movement points left – so you can throw and engage the target you have already damaged, or throw and run away.

While historically this is somewhat inaccurate, as Samurai were excellent bowmen, in game terms it works very well. You can also call up a second, smaller, map which allows you to scout out the temple. I didn't realise this, and spent the entire game (actually all four I managed to play) in the dark. I got slaughtered – but I probably would have done anyway, as Samurai isn't the easiest of games.

Samurai is not one of the most complex of games, but that works in its favour. It plays fast and it's addictive. Every time you get wiped off the map you keep coming back for more. And the graphics are so good that it's a joy to play. I haven't seen a game this good in a long time.

The only thing that worries me is that it could be a bit limited: but the design-your-own-side mechanics should allow for varied games ■

Outside the city walls, with much fighting on the battlements ▼



FACTS BOX

Samurai is absolutely brilliant, superb, and wonderful. I can't wait to see a follow up. A classic strategy game

★★★★★

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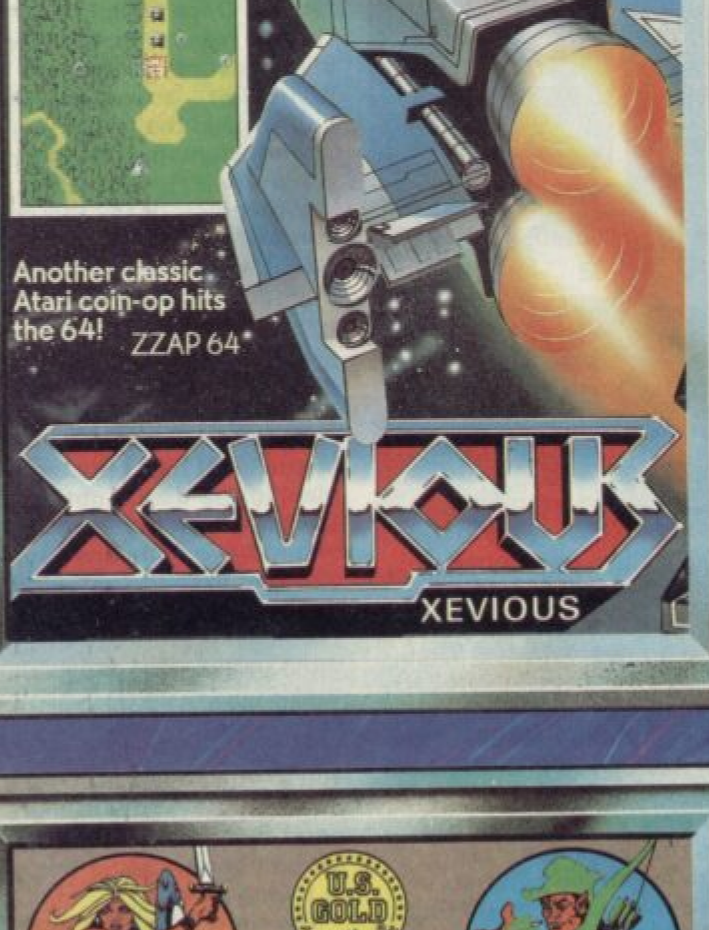
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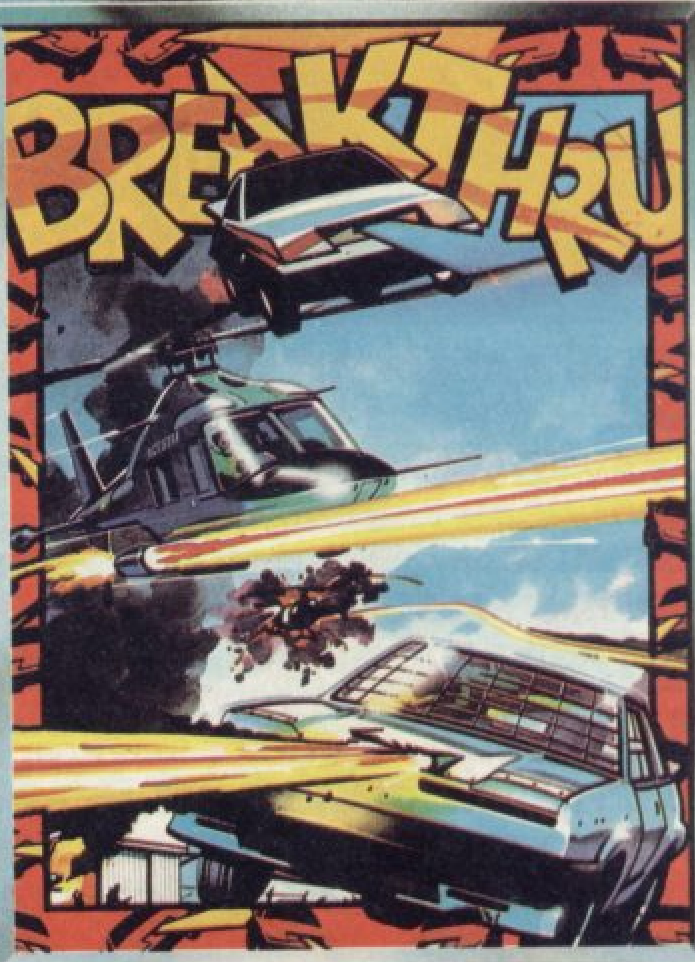
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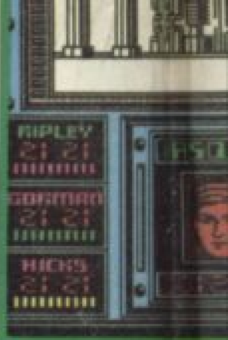
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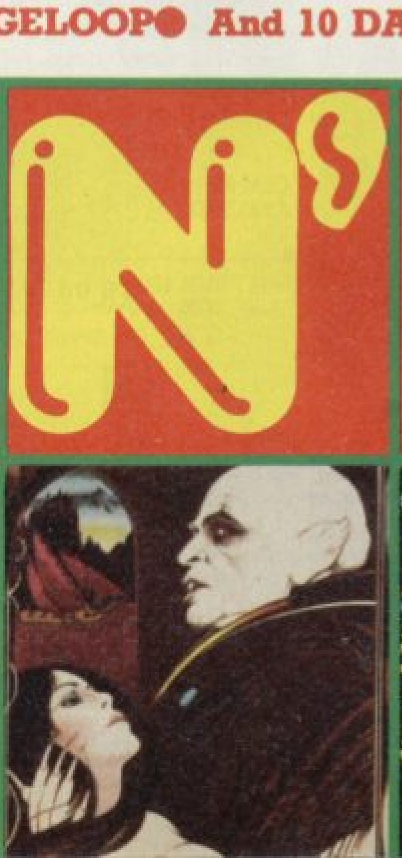
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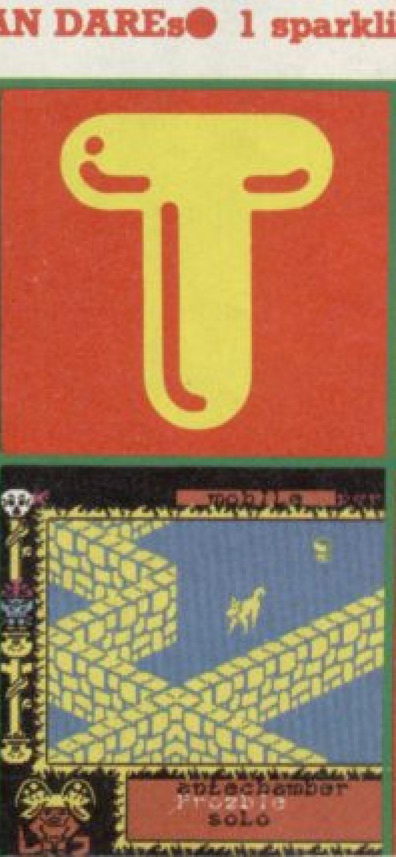
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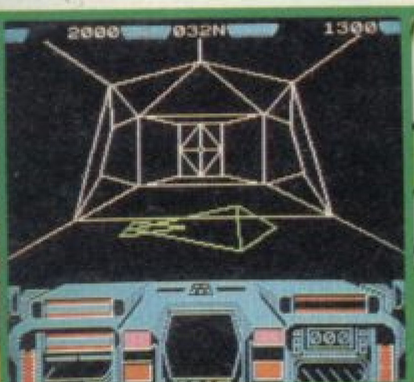






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Best Arcade game

....

Best/Worst Film/

a)...
b)...

Best/Worst LP/

a)...
b)...

Best strategy/wargame

....

What colour should the +2 have been?

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Best piece of QL software

....

Rip-off of the year

....

Most horrific licencing deal

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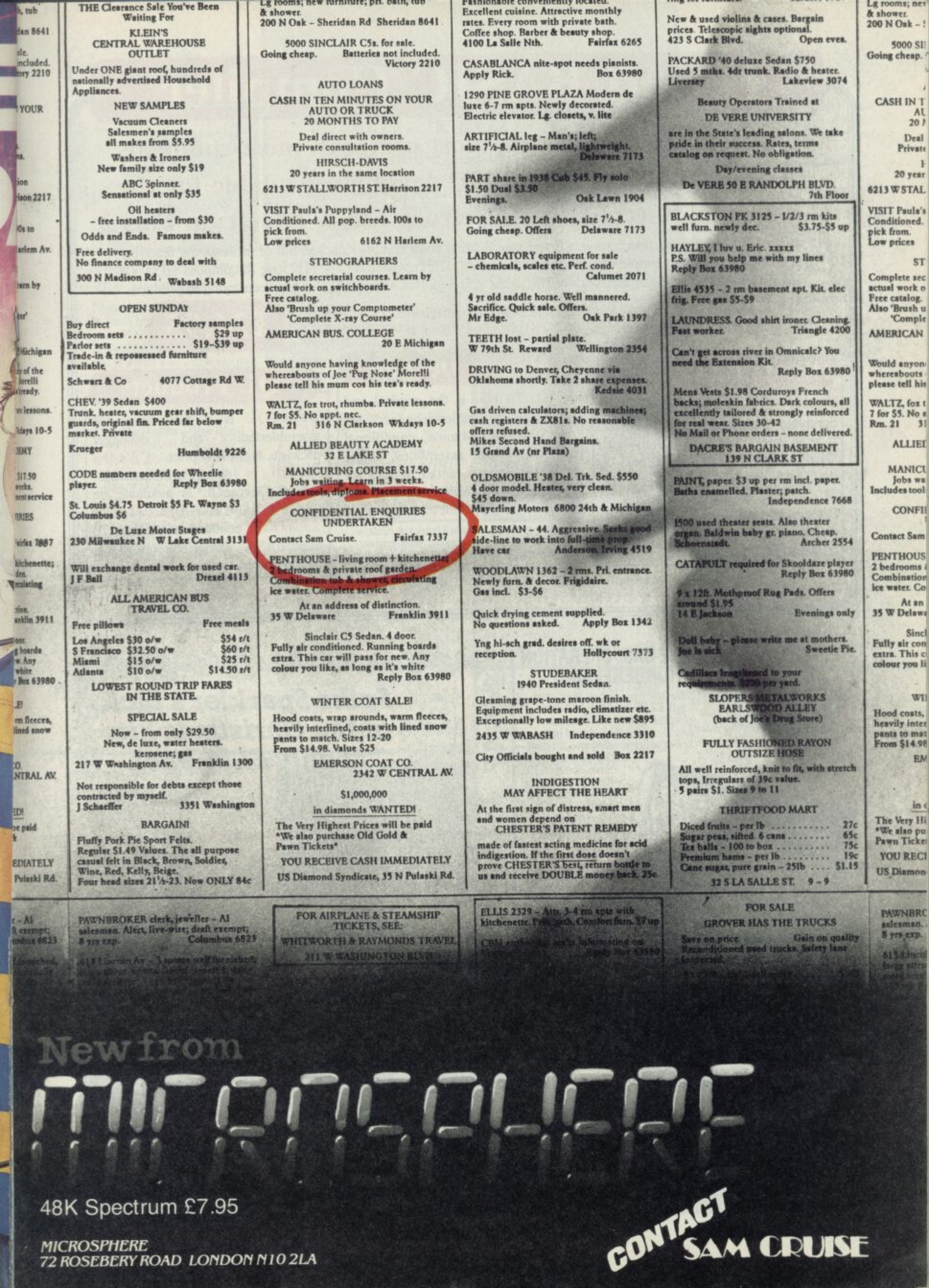
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CHEV. '39 Sedan $400
Trunk. heater, vacuum gear shift, bumper guards, original fin. Priced far below market. Private
Krueger Humboldt 9226
CODE numbers needed for Wheelie player. Reply Box 63980
St. Louis $4.75 Detroit $5 Ft. Wayne $3 Columbus $6
De Luxe Motor Stages
230 Milwaukee N W Lake Central 3131
Will exchange dental work for used car. J F Ball Drexel 4113
ALL AMERICAN BUS TRAVEL CO.
Free pillows Free meals
Los Angeles $30 o/w $54 r/t
S Francisco $32.50 o/w $60 r/t
Miami $15 o/w $25 r/t
Atlanta $10 o/w $14.50 r/t
LOWEST ROUND TRIP FARES IN THE STATE.
SPECIAL SALE
Now – from only $29.50
New, de luxe, water heaters. kerosene; gas
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Not responsible for debts except those contracted by myself.
J Schaeffer 3351 Washington
BARGAIN!
Fluffy Pork Pie Sport Felts.
Regular $1.49 Values. The all purpose casual felt in Black, Brown, Soldier, Wine, Red, Kelly, Beige.
Four head sizes 21½-23. Now ONLY 84c
Lg rooms; new furniture; pri. bath, tub & shower.
200 N Oak – Sheridan Rd Sheridan 8641
5000 SINCLAIR C5s. for sale.
Going cheap. Batteries not included. Victory 2210
AUTO LOANS
CASH IN TEN MINUTES ON YOUR AUTO OR TRUCK
20 MONTHS TO PAY
Deal direct with owners.
Private consultation rooms.
HIRSCH-DAVIS
20 years in the same location
6213 W STALLWORTH ST. Harrison 2217
VISIT Paula's Puppyland – Air Conditioned. All pop. breeds. 100s to pick from.
Low prices 6162 N Harlem Av.
STENOGRAPHERS
Complete secretarial courses. Learn by actual work on switchboards.
Free catalog.
Also 'Brush up your Comptometer' 'Complete X-ray Course'
AMERICAN BUS. COLLEGE
20 E Michigan
Would anyone having knowledge of the whereabouts of Joe 'Pug Nose' Morelli please tell his mum cos his tea's ready.
WALTZ, fox trot, rhumba. Private lessons. 7 for $5. No appt. nec.
Rm. 21 316 N Clarkson Wkdays 10-5
ALLIED BEAUTY ACADEMY
32 E LAKE ST
MANICURING COURSE $17.50
Jobs waiting. Learn in 3 weeks.
Includes tools, diploma. Placement service
CONFIDENTIAL ENQUIRIES UNDERTAKEN
Contact Sam Cruise. Fairfax 7337
PENTHOUSE – living room + kitchenette; 2 bedrooms & private roof garden. Combination tub & shower, circulating ice water. Complete service.
At an address of distinction.
35 W Delaware Franklin 3911
Sinclair C5 Sedan. 4 door.
Fully air conditioned. Running boards extra. This car will pass for new. Any colour you like, as long as it's white
Reply Box 63980
WINTER COAT SALE!
Hood coats, wrap arounds, warm fleeces, heavily interlined, coats with lined snow pants to match. Sizes 12-20
From $14.98. Value $25
EMERSON COAT CO.
2342 W CENTRAL AV.
$1,000,000
in diamonds WANTED!
The Very Highest Prices will be paid
We also purchase Old Gold & Pawn Tickets
YOU RECEIVE CASH IMMEDIATELY
US Diamond Syndicate, 35 N Pulaski Rd.
Fashionable conveniently located.
Excellent cuisine. Attractive monthly rates. Every room with private bath.
Coffee shop. Barber & beauty shop.
4100 La Salle Nth. Fairfax 6265
CASABLANCA nite-spot needs pianists.
Apply Rick. Box 63980
1290 PINE GROVE PLAZA Modern de luxe 6-7 rm apts. Newly decorated. Electric elevator. Lg. closets, v. lite
ARTIFICIAL leg – Man's; left; size 7½-8. Airplane metal, lightweight. Delaware 7173
PART share in 1938 Cub $45. Fly solo $1.50 Dual $3.50
Evenings. Oak Lawn 1904
FOR SALE. 20 Left shoes, size 7½-8.
Going cheap. Offers Delaware 7173
LABORATORY equipment for sale – chemicals, scales etc. Perf. cond. Calumet 2071
4 yr old saddle horse. Well mannered. Sacrifice. Quick sale. Offers.
Mr Edge. Oak Park 1397
TEETH lost – partial plate.
W 79th St. Reward Wellington 2354
DRIVING to Denver, Cheyenne via Oklahoma shortly. Take 2 share expenses. Kedsie 4031
Gas driven calculators; adding machines; cash registers & ZX81s. No reasonable offers refused.
Mikes Second Hand Bargains.
15 Grand Av (nr Plaza)
OLDSMOBILE '38 Del. Trk. Sed. $550
4 door model. Heater, very clean.
$45 down.
Mayerling Motors 6800 24th & Michigan
SALESMAN – 44. Aggressive. Seeks good side-line to work into full-time prop.
Have car Anderson, Irving 4519
WOODLAWN 1362 – 2 rms. Pri. entrance. Newly furn. & decor. Frigidaire.
Gas incl. $3-$6
Quick drying cement supplied.
No questions asked. Apply Box 1342
Yng hi-sch grad. desires off. wk or reception. Hollycourt 7373
STUDEBAKER
1940 President Sedan.
Gleaming grape-tone maroon finish. Equipment includes radio, climatizer etc. Exceptionally low mileage. Like new $895
2435 W WABASH Independence 3310
City Officials bought and sold Box 2217
INDIGESTION MAY AFFECT THE HEART
At the first sign of distress, smart men and women depend on
CHESTER'S PATENT REMEDY
made of fastest acting medicine for acid indigestion. If the first dose doesn't prove CHESTER'S best, return bottle to us and receive DOUBLE money back. 25c
New & used violins & cases. Bargain prices. Telescopic sights optional.
423 S Clark Blvd. Open eves.
PACKARD '40 deluxe Sedan $750
Used 5 mths. 4dr trunk. Radio & heater.
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Beauty Operators Trained at
DE VERE UNIVERSITY
are in the State's leading salons. We take pride in their success. Rates, terms catalog on request. No obligation.
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BLACKSTON PK 3125 – 1/2/3 rm kits well furn. newly dec. $3.75-$5 up
HAYLEY, I luv u. Eric. xxxxx
P.S. Will you help me with my lines
Reply Box 63980
Ellis 4535 – 2 rm basement apt. Kit. elec frig. Free gas $5-$9
LAUNDRESS. Good shirt ironer. Cleaning. Fast worker. Triangle 4200
Can't get across river in Omnicalc? You need the Extension Kit. Reply Box 63980
Mens Vests $1.98 Corduroys French backs; moleskin fabrics. Dark colours, all excellently tailored & strongly reinforced for real wear. Sizes 30-42
No Mail or Phone orders – none delivered.
DACRE'S BARGAIN BASEMENT
139 N CLARK ST
PAINT, paper. $3 up per rm incl. paper. Baths enamelled. Plaster; patch. Independence 7668
1500 used theater seats. Also theater organ. Baldwin baby gr. piano. Cheap.
Schoenstadt. Archer 2554
CATAPULT required for Skooldaze player Reply Box 63980
9 x 12ft. Mothproof Rug Pads. Offers around $1.95
14 E Jackson Evenings only
Dull baby – please write me at mothers. Joe is sick Sweetie Pie.
Cadillacs lengthened to your requirements. $200 per yard.
SLOPERS METALWORKS
EARLSWOOD ALLEY
(back of Joe's Drug Store)
FULLY FASHIONED RAYON OUTSIZE HOSE
All well reinforced, knit to fit, with stretch tops, Irregulars of 39c value.
5 pairs $1. Sizes 9 to 11
THRIFTFOOD MART
Diced fruits – per lb 27c
Sugar peas, sifted. 6 cans 65c
Tea balls – 100 to box 75c
Premium hams – per lb 19c
Cane sugar, pure grain – 25lb $1.15
32 S LA SALLE ST. 9 – 9
PAWNBROKER clerk, jeweller – AI salesman. Alert, live-wire; draft exempt; 8 yrs exp. Columbus 6823
FOR AIRPLANE & STEAMSHIP TICKETS, SEE:
WHITWORTH & RAYMONDS TRAVEL
ELLIS 2329 – Atts. 3-4 rm apts with kitchenette.
FOR SALE
GROVER HAS THE TRUCKS
Save on price. Gain on quality
Reconditioned used trucks. Safety lane inspected.
New from
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48K Spectrum £7.95
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CONTACT SAM CRUISE

1986. That's it?

About this time of year, what with the old year passing and a New Year just beginning we journalists like to reflect on what's gone before. It also gives each member of the crack SU team a chance for glory and fame quite out of keeping with their actual status in the world.

So we bring you, at great expense(s) the Sinclair personality Top Ten Best Things in the universe and more. . .

Not only that, you get a chance to vote for YOUR most favourite games, other things, real dodos etc in our 1986 Readers Poll – just turn back to page 68 . . .



Favourite ten things in the Universe

1 Single: Warriors of the Wasteland by Frankie Goes to Holywood.
2 Album: Arena, by Duran Duran. It's live and I can forgive Simon Le Bon's David Bowie impression.
3 Video of Wild Boys by Duran Duran.
4 Film: Gremlins – the film. The best liquidiser gag in the biz
5 Director: Stephen Spielberg. I loved ET – but not as much as Gremlins which he only produced
6 TV: Lives and Loves of a She Devil. Fay Wheldon is brill!
7 Book. 'Salems Lot by Stephen King. I've read it four times
8 Pub. The Metropolitan Cellar Bar. They do great beef burger
9 Disco. Flicks, Dartford. If you've been there you'll know why!
10 Food. Duck Pate – on lightly browned bread. Feeding it to the ducks is the best part

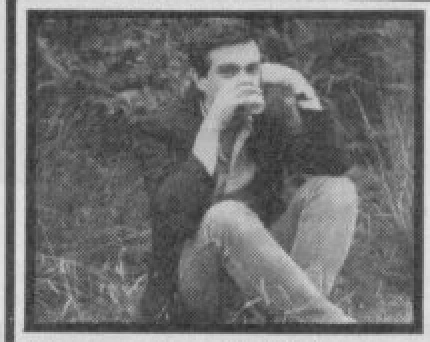
Top 5 games of 1986

1 Dandy.
2 Uridium.
3 Movie.
4 Heavy on The Magic.
5 Winter Games 128.

Five of the worst things ever invented

1 The 8.14 from Albany Park to Cannon Street. Doncha just luv playing those operating difficulties. Game plans can be purchased at the ticket office – it's the window with the long queue in front of it
2 Bores. Especially telephone bores
3 Balloons. Sudden noises turn me homicidal
4 Sleep. I never get it so I don't miss it
5 Time Tables. You just know they're always going to be wrong but you look at them just the same.

John Gilbert



Favourite 10 things in the Universe

1 Jeffery Archer's resignation.
2 Getting a walkman that worked properly.
3 Starglider. A game I would go out and buy. . .
4 Everything by Phillip Glass.
5 This really cheap Italian suit I found in a shop in Southend. You should see it it's really neat
6 Amstrad taking over Sinclair. Yeah I know, some people will disagree.
7 The Sinclair 128K+2 – if you can a) get one b) get one without a dodgy tape alignment or odd modulator. It's excellent
8 Playing with my CZ101 synth, now Midied to the CT6000.
9 "A large Souvlaki in pitta with a powtion a chips and lot a chilli playse!"
10 Academy. See 3

Top 5 games of 1986

1 Starglider.
2 Academy.
3 Lightforce.
4 Trapdoor.
5 Dandy.

Five of the worst things ever invented

1 Any game with the word 'whacky' in it
2 Any adventure game with a magic orb in it
3 Car stickers.
4 Religious loonies with carrier bags
5 That advert with the total pillock who says "how's your ego?"

Graham Taylor

Favourite 10 things in the unviverse

1 Movie of '86: Aliens
2 Video release: Repro Man or Birdy The lead actor in Repro Man is just so angry, and Harry Dean Stanton is about as cool as anyone over 30 could possibly be
3 LP: Talking Heads' "Stop Making Sense" "Burning Down The House" must be the best record ever
4 Tie: It's quite dark, with little black squares, and green and red bits and the occasional gold dot
5 Colour: Blue
6 Smell: creasote, check this spelling, David. (Looks wrong – Ed)
7 Place in London: Davies St/Berkeley Sq
8 Length of music tape: C90
9 Station: Baker Street tube
10 Car park: Kingston upon Thames NCP. You can get right up the top and the view is great.



Top 5 of 1986

1 Uridium
2 Lightforce
3 Thantos
4 Split Personalities
5 Firelord

Five of the worst things ever invented

1 Crowds
2 The 'popular' press. No comment.
3 The £50 limit on cheques
4 Answerphones
5 Football

Jim Douglas

Favourite ten things in the universe

1 Late night movies. Front row, wide screen, preferably SF – Bladerunner would do
2 Coffee.
3 Right now it's either The Walker Brothers or The Beastie Boys. Ella's OK too
4 Music videos – all of them. I wish they chained them end-to-end on all night TV.
5 Turning the sound right up.
6 Westerns. Especially the one's where the plot is really a metaphor etc etc yeah yeah. . .
7 Portable manual typewriters
8 Marston's Pedegree. I've spotted I'm the only one who's included amy kind of booze in their ten. What does this mean – they're all liars
9 The Fiat whateveritis Spyder.
10 '30s style. Not a lot of progress since then really

Top 5 games of '86

1 Glider Rider
2 Uridium
3 Head Coach
4 Ghosts 'n' Goblins
5 Anything by Delta 4

Five of the worst things ever invented

1 Dealing with shops when things you buy go wrong. Comet has just lost my camera. . .
2 There's this stuff called Irn Bru which someone I know drinks. It's horrible
3 Those iron railings to stop you trying to cross the road where THEY don't want you to. Painfully spikey rocks set into the ground to stop you walking down the central reservation get my vote too
4 Sunshine. I'm convinced it's bad for you. Also health foods, sugar substitutes and exercise
5 And then there's war, violent crime, rape, political respression and human rights abuses. . .



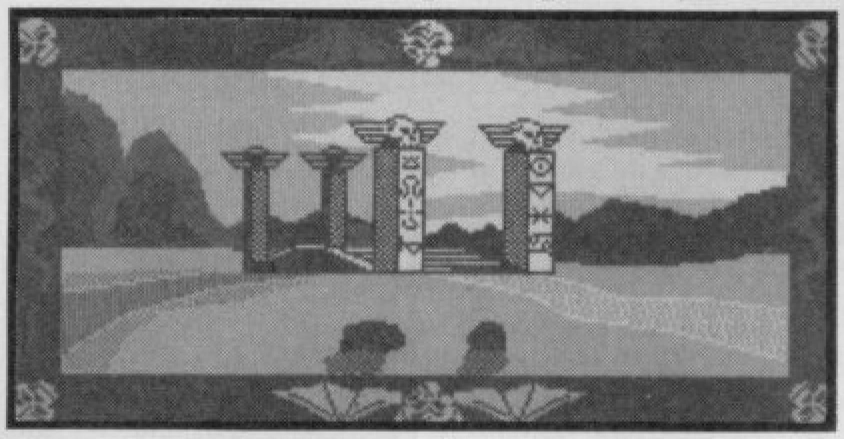
David Kelly

Putting your games software onto the streets

Andrew Hewson explains how to begin your own mini games company

Anthony and John Poval of St Neots are putting me on the spot and for that I am sending them a copy of **Pyracurse** for this month's star letter. They write: **We are writing a graphic adventure using Incentive's** Graphic Adventure Creator. **It is not exactly Level Nine stuff but we are hoping to sell it to one of the budget games companies. Can you give us some advice on selling the game, any precautions we should take, and idea of how much it would be worth and so forth?**

Ooooh! This is a difficult one for me. Far be it from me to



discourage people from writing software for sale but surely the first question that you must answer, Anthony and John, is 'Is your program worth anything at all'? Would you spend your hard-earned cash on a program which the authors themselves admit is written with a program creator and is 'not exactly Level Nine stuff'. Unless your honest answer is 'Yes you would spend your money to buy your own program' then you have no chance of convincing the rest of the world to part with their money for your program.

OK, you two, I'm convinced. You honestly believe that your program is worth spending money on. Now how are you going to sell it? For a start you have to realise that you are not the only people in the entire world who are beavering away with Incentive's **Graphic Adventure Creator** or its equivalents. You've decided to approach a budget software company. Realistically you have to realise that a large number of other people will be following the same path. How are you going to ensure that your game is the one that gets accepted for publication so that you get paid?

My advice is to make it as easy as possible for your target publisher to get to know your game. There are lots of little things you can do to help:

- Record your program several times on the cassette that you send off for evaluation – you don't want to fail because the publisher cannot load the game.
- Write a concise, business-like

Astounding assembly

Kulwinder Singh of Isleworth writes to say lots of flattering things about Uridium **which I won't repeat here. I'm glad you like it. One of my problems is tearing my programmers away from it – somehow they are always 'just testing' it, or 'checking that it works with the new Sprodoggly Wizzo joystick'. If they're really stuck for an excuse then it suddenly seems to be their lunch hour.**

Kulwinder also says: I want to write a game which is just as good and I am starting to learn machine code but I have difficulty in printing on the screen. I know you can use *Call* 3545 to set the *X* and *Y* co-ordinates and *Rst* 16 to print but it doesn't work.

Doesn't work! Don't be daft, of course it works!! That's how stuff gets *Printed* on the screen? There's no magic involved – just repeated use of *Rst* 16.

The procedure is simple once you get to know what's going on. First of all call the routine at 5633 (1601 in hex) with register A set to the stream number of the output device that you wish to use. Normally you won't need to do this when writing to the screen because the Spectrum will aready be set to write to the screen (as opposed to Microdrive or printer or whatever) but it is as well to do so just in case. The stream number for the screen is 2.

Next you can use the routine at 3545 (ODD9 in hex) to set the screen row and column positions at which printing is to occur. To do this load the B register with the screen row counting from the bottom (so that the top row is number 24) and the C register with the screen column starting with Column 2 being at the extreme right (so that the extreme left colum is number 33). Yes, I know it would make more sense to start at the top left-hand corner and label it Row 0, Column 0 but I didn't write the Spectrum Rom routines so don't blame me. If this sort of thing really upsets you why not write a little routine as a 'front end' which alters the B and C registers from what makes sense to what is required and then calls the Rom routine.

Having established that you want to write to the screen and set the area you want to write to you are now ready to print a character. Put the code of the required character into the A register and call *Rst* 16 (10 in hex). Easy isn't it? The routine in Table 1 prints the letter "A" at the top left of the screen. The routine in Table 2 prints all the characters with codes lying between 32 and 255. Both of these routines can be loaded into the Spectrum printer buffer using the simple loader in Table 3.

Table 1. A routine to print the letter "A" at the top left-hand corner of the Spectrum screen

Decimal	Assembly Code	Comment
62 2	1d a,2	Select the screen output stream
205 1 22	call 1601h	And call the routine to do it
6 24	1d b,18h	Select the top row
14 33	1d c,21h	Select the left-hand colum
205 217 13	call Odd9h	And call the routine to do it
62 65	1d a,41h	Load A with the code for "A"
215	rst 10h	and call the routine to print it
201	ret	Bye-bye

Table 2. A Spectrum program to *Print* the characters with code in the range 32 to 255 inclusive. Note that when the a register contains 255, the effect of the *Inc* A instruction is the same as subtracting 255, ie A subsequently contains zero

Decimal	Assembly Code	Comment
62 32	1d a,32	Load the A register with 32
245	Again push af	Save A on the stack
215	rst 16	*Print* the character
241	pop af	Retrieve A from the stack
60	inc a	Increment the A register
32 250	jr nz, Again	Jump to *Print* next character
201	ret	Return when A reaches zero

Table 3. A simple decimal loader for *Pokeing* decimal numbers into the Spectrum printer buffer. To halt the program enter *Stop (Symbol Shift A)*

```
10 FOR I = 23296 TO 23551
20 INPUT J
30 POKE I , J
40 PRINT I , J
50 NEXT I
```

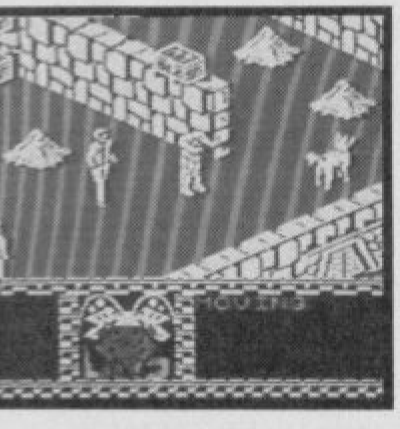
A good clear-out

Thank you for the stamp, Stanley Gee of Leeds. Unfortunately I shan't be using it because I'm replying to you through the medium of this column. This means that the Post Office are going to be 13p better off than they would otherwise have been. Not much chance of getting your money back from the person at the till I suppose. However I digress.

Stanley asks: **What is the difference between *Clear* 30000 which sets RamTop to 30000 and *Poke* 23730,48: *Poke* 23731,117 which changes the RamTop system variable directly? Also I note from time to time the command *Clear* 65535 followed by a machine-code routine placed below this address. What purpose does this serve?**

The *Clear* command does a lot of other bits and pieces besides changing the RamTop system variable. First of all it throws away all current Basic variables so that if you have just *Run* a Basic program to store your mother's birthday in a variable called *Mum$* you will

HEWSON HELPLINE



letter. Make sure your name, address and phone number are on the letter. Include a *brief* description of your game in the letter and explain which machines it runs on.

● Include a detailed explanation of the game in a separate document. Don't leave out the best bits with the idea that the publisher should be forced to play the game for hours to get a feel for it. Include a map and a list of cheats.

● If you are good at drawing, include a few sketches of the main visual parts of the game.

● If you have had other material published make sure you refer to it clearly in your letter and if your material has been reviewed include relevant photocopies.

● Above all, sell yourself!

You say you feel the need to take precautions – presumably against your target publisher releasing the program without your knowledge and then refusing to pay you your dues. The first thing you need to be able to do if a dispute ever arises is to prove that you wrote the software in question. To do this you require an independent witness so why not deposit a copy of the program on cassette (or preferably several copies in case of accident) with a reputable independent organisation like your bank or solicitor.

If you don't have easy access to a bank or solicitor then simply post a copy of the program by registered post to yourself in a sealed envelope. The Post Office will automatically date stamp the envelope for you and providing you *don't open the envelope* when it arrives you will be able if necessary at some time in the future to open it in front of witnesses and prove that you possessed the program by a given date. Since you wrote the program and you have wisely not yet given anyone else access to it no-one will be able to prove that they had the program at an earlier date – which goes a good way towards proving that the program is yours.

A second simple precaution is only to approach a reputable publisher. You will be treated fairly if sometimes firmly (remember even if you and all your friends, relatives, neighbours, teachers, school mates *and* the local vicar all agree that your program is wonderful in all respects your target publisher is at liberty to disagree!

Finally, how much is your program worth? That is an impossible question to answer because it depends how good it is. Don't be mislead by the stories of people making a fortune from writing software. With persistence and a healthy amount of commonsense you can earn a comfortable living along with the several tens of thousands other people in the country who all want to do the same thing. As a guide a first class computer program for the Spectrum written by an established team is probably worth about as much in advance as an ordinary family car but the budget program you are aiming at, Anthony and John, is probably worth much less – say as much as a five-year saloon with 60,000 miles on the clock! Good luck.

find that after a *Clear* command the instruction *Print Mum$* will no longer work. It also clears the screen display (like *Cls)* resetting the *Print* position to the top left-hand corner and the *Plot* position to the bottom left-hand corner. It rewinds all the *Data* and *Read* pointers in the manner of a *Restore* command and finally it changes RamTop and moves the *Gosub* stack so that it lies immediately below the new RamTop value.

Clear is quite a busy little command. Changing RamTop by *Poking* the system variable is a bit like moving into the house next door without telling the postman, the milkman or the newspaper boy. You may get away with it but the chances are you're going to create a bit of a muddle!

Clear 65535 has the effect of giving you the maximum amount of room possible for your Basic programs. Why anyone should want to put a machine-code routine below RamTop is not immediately clear to me. All I can say is that it is a bit risky although you can get away with it provided you know what you are doing. In particular you must be careful where you put the machine stack.

Excuses!

Regular readers will remember the competition a month or two ago in which you were invited to send a photocopy of the very first *Helpline.* The winner has been and gone long since but Ian King of Chalfont St Giles takes the wooden spoon for the phoniest excuse for not getting his entry in on time. He claims to have been on holiday when SU was published !!! Frankly, Ian, this is simply not good enough. Write out one thousand times 'I must buy my copy of SU on time and read *Helpline* straight away.

Entries for the machine-code clock routine competition are still falling through the letterbox so I have had to defer publication of the winning program. Watch out for the result next month.



Scrambled scrolling

Can you record a message scrolling across the Spectrum TV display on video tape? asks Terry Braverman of Cambridge. **This seems to my imaginative but erstwhile sensible mind not to be possible. Also, if I do plug the aerial lead from my Spectrum into the video's aerial socket will the picute quality improve on my domestic TV? Common sense suggests that it won't.**

Yes, you can record the Spectrum output on video tape. No, the picture quality is not improved – it is generally considerably worse.

As you will remember from your reading of the Spectrum manual, the Spectrum 'transmits' its UHF signal on channel 36 and so to 'receive' the transmission on your TV you must tune it to this channel number. True transmission and reception never occurs of course because you wire the Spectrum and TV together directly but there is no reason in principle why you should not put a transmission aerial on the end of your Spectrum aerial lead and broadcast to a neighbouring TV tuned to channel 36 – no reason except it's illegal of course!

Channel 36 is also used by most domestic video recorders to 'transmit' a recorded program to the TV. In order to record the Spectrum display choose a spare channel on your video recorder, plug the Spectrum aerial lead into the video input socket, connect the video output socket to the TV input and tune the video input on the channel selected to Channel 36. It's as easy as that.

In the course of our work we occasionally record games in this fashion when we want to work out how a given game is driving the TV display. Our video recorder has a 'freeze frame' facility which allows you to step through a recorded video frame by frame. Using the facility we can work out interesting things like whether the software is synchronised to the TV display (these days the answer is usually that it is), how often the screen is updated (every frame, every other frame, every fifth frame etc), how many positions are used to make up each sprite, how efficient the collision detection is and how far in terms of pixels up and down, and left and right the main sprites are moved each time they are up-dated.

The picture quality is not as good as the original because it has to go through the transmission-reception rigmarole twice instead of once and in the middle it is recorded on to video tape and then played back. Each step leads to a loss of picture quality. In normal operation the picture is mixed with the Ultra High Frequency (UHF) carrier inside the Spectrum and then unmixed inside the TV. With a video in between the unmixing occurs in the video when recording takes place and then on playback the picture is remixed for 'transmission' to the TV.

GRAPHICS TOOLKIT

REVIEW



Pyramide's already launched a graphics program, hasn't it? Why the need for another one, and why do you need to design your pictures first before you can use the package?

Simple, *Graphic Toolkit* is not just another creaky old design package. It can store several screens at a time from which it can take or combine and manipulate images to produce some startling graphics effects.

The bulk of the package consists of 70 SuperBasic extensions which are loaded into the machine on boot-up.

You can set up windows, design pointer cursors which can be controlled using the keyboard, joystick or mouse, create and *Fill* shapes, draw on the screen using a width-selectable airbrush and switch between the different display modes and the two character fonts with which all QLs are born. You can also create your own character sets.

Three programs are included to show what the **Toolkit** routines can do. The first, *Transfer_X* allows you to cut out and copy images from screen to screen.

You can also cut around images. Images can be stacked one on top of another and when you rub part of the top picture out the image beneath it reappears.

The second demo program, *Zoom Bas*, is written in SuperBasic and shows how to magnify a pixel block 28×20 by 16 times. *Definer_Bas*, the third program, also written in SuperBasic, is a simple character generator which can produce two character fonts for each screen channel.

Graphics Toolkit is almost useless to someone who doesn't have the means to generate images but it is incredibly powerful for anyone with any graphics package and the know-how to produce good art■

FACTS BOX

A fabulous image-making aid, but you'll need a graphics package in order to create the images

GRAPHICS TOOLKIT
Label: Pyramide
Price: £14.95
Memory: 128K/256K
Joystick: any, also mouse compatible

Reviewer: John Gilbert

★★★★★

BETTER BASIC



SuperBasic is a fantastic high level language but even the most adapt Basic programmer may find the structure could be improved. A *Renumber* here, a tweak there...

Better Basic does the tweaking automatically and is unique to the QL. It will not only renumber your program but will also improve its structure and, if necessary, create new lines to deal with certain functions in a more stylish or efficient manner.

The system operates in a similar way to a compiler. You create your Basic source program, load **Better Basic,** and feed it with the source which is then changed. Once the changes have been made the source is re-stored as a new file.

The **Better Basic** operating system can change the structure of your program within pre-defined limits. For instance, it may split up a long line of statements into separate lines to make them easier to read or, more drastically, exchange a long line into a subroutine which does the same task but uses different code.

If your program contains dramatic errors even **Better Basic** will not be able to cope. For instance you may have included too many *For* statements and not enough *Nexts.* **Better Basic** would run through the whole program, note the mistakes and give you a list of them at the end of the scan.

SuperBasic is a complex language and if you intend to take full advantage of it, and avoid the bugs, you'll either need to spend hours pouring over your programs or buy **Better Basic** ■

FACTS BOX

It's no panacea, but Better Basic *will point out the bugs in both the code and structure of your program as such its really useful*

BETTER BASIC
Label: Digital Precision
Author: Charles Dillon
Price: £19.95
Memory: 128K

Reviewer: John Gilbert

★★★★★

QLIBERATOR

Liberation Software, a new company, claims to have developed the definitive SuperBasic compiler.

The specification certainly looks impressive on paper but, to be equal to its claim, it will have to beat Digital Precision's new **Turbo Compiler** on speed and facilities.

Accurate timings on **Turbo** are, unfortunately, impossible to get as the program is still going through its testing phase.

However, **Turbo** compiles to full 68000 code while **QLiberator** only uses a form of P-code which is interpreted by the run-time system.

Once you look at features, though, the two packages are fairly evenly balanced.

QLiberator will compile all SuperBasic programs, and there's no code limit so you can add memory board and external storage devices – such as discs – with little or no change to the program.

Liberation's program works in a similar way to **Turbo** but is simpler to use. When you boot it up a set of SuperBasic command extensions are loaded into memory. You can then either load and edit the SuperBasic program or invoke the compiler with one command.

The *Ivoke* command is *Liberate Mdv1_* followed by the file name of the source. This command will run through the compilation process automatically and store the resulting object code back on the Mdv1 with the suffix *_Ob/j/.*

QLiberator is a powerful SuperBasic compiler which will handle any correct source code given to it. The compiler is simpler to use than DP's **Turbo** but does not have the latter's complexity. It will be good for intermediate level SuperBasic programmers who want a no fussing way of doubling the speed of their software ■

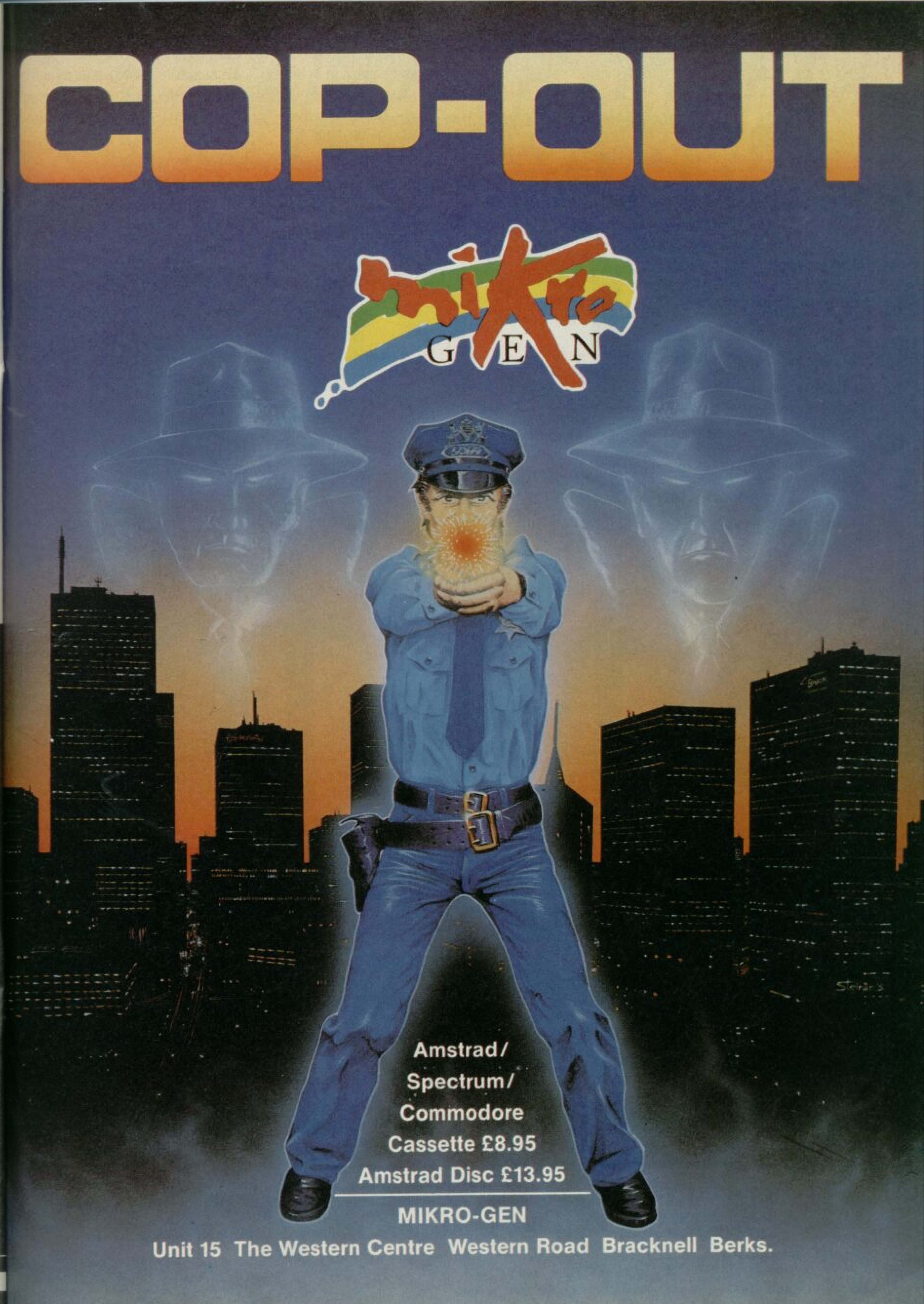
FACTS BOX

At last, a compiler which everyone can understand. Compiles all SuperBasic source code, but to P-code

QLIBERATOR
Label: Liberation Software, 43 Clifton Road, Kingston Upon Thames, Surrey
Price: £69.95
Memory: 128K/512K

Reviewer: John Gilbert

★★★★☆


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(F) BBC
(G) Electron
(H) MSX

Games — No1 F

Unbelievable Ultimate

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Atic Atac / Sabre Wolf — Underwurlde / Alien 8 (A)

Entombed / Blackwyche — Staff of Karnath / Imhotep (B)

Sabre Wulf — Alien 8 / Nightshades (C) £7.99

Jetpac / Nightshades — Knightlore / Sabre Wulf (F)

Alien 8 / Gunfright — Knightlore / Nightshades (H)

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Pac Man / Dug Dug — Mr. Do! / Pole Position (E)

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Tigers in the Snow / Germany 1985 — Combat Leader / Knights of the Desert (B)

Big names Bonanza

Fight Night / Stellar 7 — Forbidden Forest / Talladega (B)

Krazy Kids

Kermit / Donald Duck — Return to Oz / Congo Bongo (B)

All cassettes £9.99 (Except Unbelievable Ultimate Amstrad £7.99)

At a time when you're being showered with cut price bargains, amazing value packs or stunning compilations (of games you've never heard of?), then it's hard to work out what is a good buy and what isn't. Cast off the confusion and look no more, for here we present a range of compilations of games that are classics in their own right, or have established pedigrees which guarantee their quality.
Here we have compiled a series of products which stand as the master of any of its rivals.

quality compilations

Shoot Em-Ups

Super Zaxxon — Dropzone
Blue Max 2001 — Fort Apocalypse
Ⓑ Ⓔ

Amstrad Academy

Zorro — Bruce Lee
Dambusters — Bounty Bob
Ⓒ

Spectrum Stingers

Bruce Lee — Zorro
Pole Position — Cyberun
Ⓐ

Scott Adams Scoops

Voodoo Castle — Strange Odyssey
Buckaroo Bonzai* — Pirate Adventure
Ⓐ Ⓑ Ⓒ Ⓓ

Voodoo Castle — Strange Odyssey
Buckaroo Bonzai* — Pirate Adventure
Ⓔ Ⓕ Ⓖ Ⓗ

Broderbund Blasters

Karateka — Stealth
Choplifter — Spellunker
Ⓑ

Atari Aces

Zorro — Up n Down
Spy Hunter — Tapper
Ⓔ

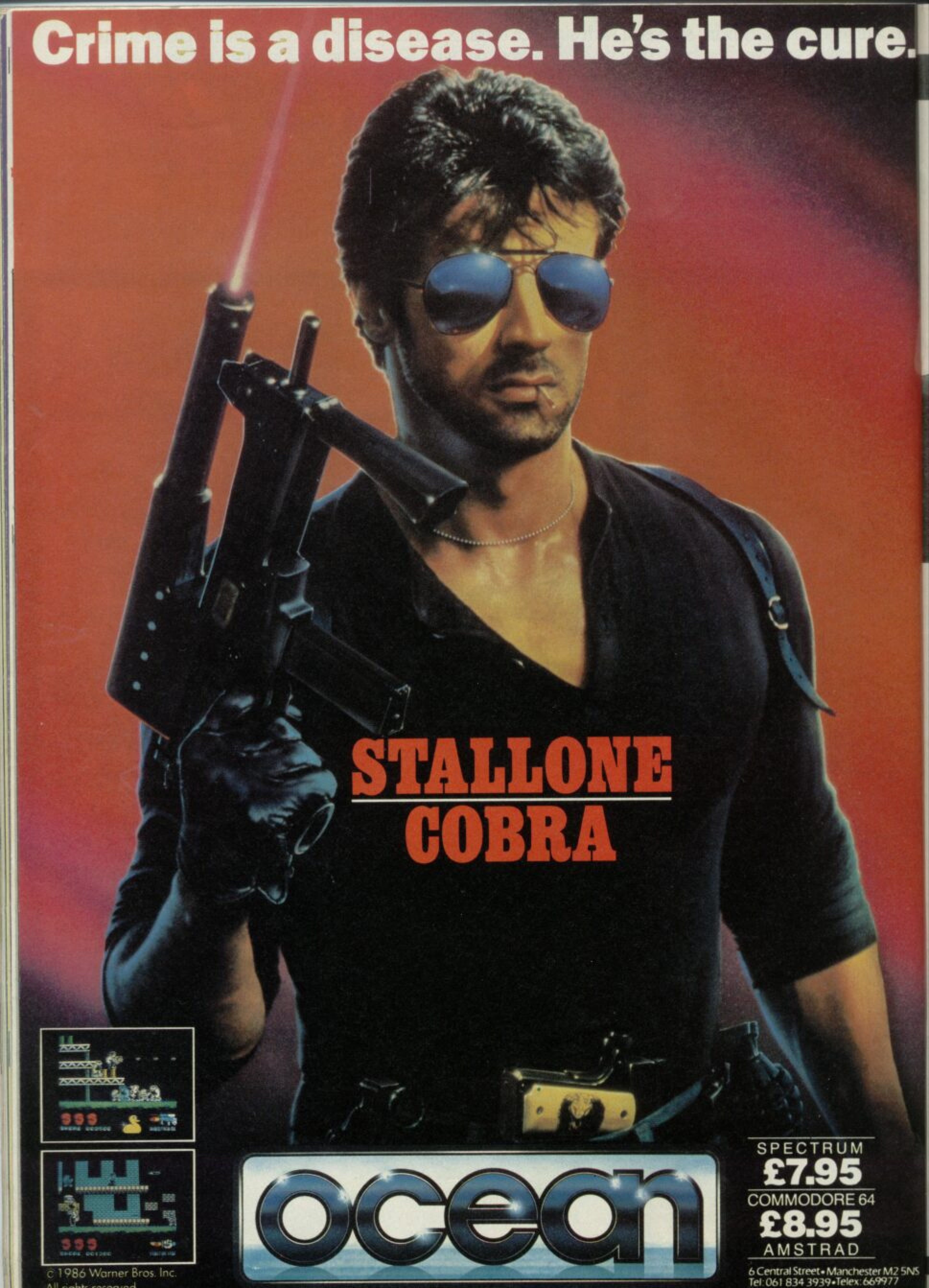
Platform Perfection

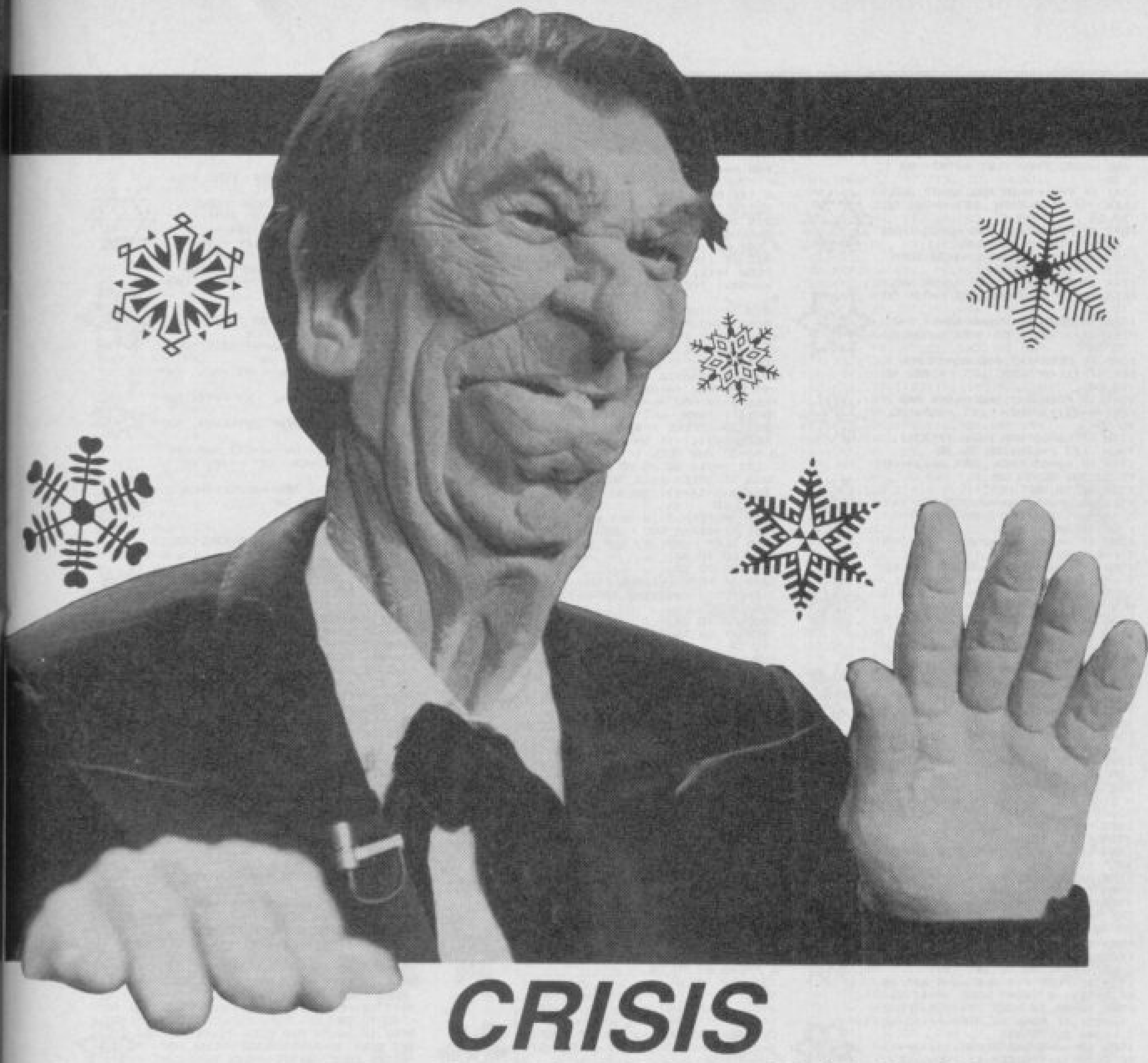
Zorro — Bruce Lee
Bounty Bob — Ghostchaser
Ⓔ

Zorro — Bruce Lee
Bounty Bob — Ghostchaser
Ⓑ

* (Previously unreleased)

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CRISIS AT CHRISTMAS

TOM FROST

All is quiet in the peaceful land of Milton Keynes. In the black of night (9.30) the snow falls gently on to the elevated walkways.

A red balloon falls from a neatly pruned birch tree on to the crisp, short, frost grass.

It's Christmas Eve, and everyone is asleep except you.

Crisis at Christmas – a yuletide adventure of mammoth proportions – lets you take the role of either Ron or Nancy – the ultimate Miltonions – in attempting to secure another idyllic and calm Christmas for your children.

Having received a call from your better half, informing you they won't be back from the white house (they're all white – it is snowing) to finish the present-wrapping, it is your responsibility to locate, wrap and position two remaining gifts.

Explore the locations in the adventure, following standard command routines (N for north, S for south etc).

Typing in the game

You will need two cassettes.

- **Type in Listing 1 and save using *Goto* 100 (put it at the start of Tape A)**
- **Type in Listing 2 and save using *Goto* 9990 (put this on Tape A, after Listing 1)**
- **Re-set computer**
- **Type in Listing 3 and enter the data from Listing 4, one number at a time. Follow the on-screen instructions to save this on Tape A after the Basic listing.**
- ***Goto* 9902 will now start the program but for safety, *Save* the whole lot on to Tape B using *Goto* 9990**

Listing 1

```
  10 CLEAR 53484
  20 BORDER 0: PAPER 0: INK 0: B
RIGHT 1: CLS
  30 PRINT  PAPER 7; INK 2;AT 8,
5;" CHRISTMAS ADVENTURE "
  40 PRINT  INK 5;AT 13,4;"With
Seasonal Greetings             f
rom Tom Frost."
  50 LOAD ""
 100 SAVE "loader" LINE 10
```

Listing 2

```
   5 REM listing 3
  10 CLEAR 53484
  15 BORDER 7: PAPER 7: INK 0: B
RIGHT 0: CLS
  16 PRINT AT 8,4;"Press a key t
o start"
  17 PAUSE 0
  18 CLS
  20 FOR x=53485 TO 65192
  30 IF x=64062 THEN  LET x=6443
0
  40 POKE 23692,255
  50 LET z=0
  60 FOR y=1 TO 7
  70 PRINT x;"......";
  80 INPUT d
  90 LET z=z+d
 100 POKE x,d
 110 PRINT d
 120 LET x=x+1
 130 NEXT y
 140 INPUT c
 150 IF c<>z THEN  GO TO 200
 155 LET x=x-1
 160 NEXT x
 170 CLS
 180 PRINT AT 8,1;"Now SAVE afte
r BASIC listing."
 190 SAVE "SYSTEM"CODE 53485,117
08
 195 STOP
 200 FOR b=1 TO 20: BEEP .05,b:
NEXT b: BEEP .5,20
 210 PRINT "ERROR in previous 8
inputs......Please enter them ag
ain."
 220 LET x=x-7
 230 GO TO 30
 250 SAVE "input" LINE 10
```

Listing 3

```
  10 POKE 23500,r: RANDOM
IZE USR PRMS: RETURN
  20 LET r=15
  30 POKE 23500,r: RANDOMIZE USR
 PRMS
  32 IF PEEK (f+12)=1 THEN  PAUS
E 100: POKE (f+12),0: GO TO 100
  35 GO TO 195
  40 PRINT  INK 5;AT 13,4;"With
Seasonal Greetings             f
rom Tom Frost."
  50 LOAD ""
 100 BORDER 0: PAPER 0: INK 0: B
RIGHT 1: CLS
 101 IF res=1 THEN  GO SUB 8000:
 LET res=0
 102 GO SUB 7000+PEEK f+10
 103 LET zz=f+PEEK f+40
 105 IF (PEEK f=2 OR PEEK f=11)
THEN  GO TO 195
 110 RANDOMIZE USR PRNY
 195 BEEP .1,20: RANDOMIZE USR S
YS
 202 LET vb=PEEK 64114
 204 LET no=PEEK 64115
 205 IF no=0 AND PEEK (f+29)=1 T
HEN  LET no=21
 220 IF vb=200 OR no=201 THEN  G
O TO 20
 230 IF (PEEK f=2 OR PEEK f=11)
AND (vb<>0 AND vb<>20 AND vb<>6
AND vb<>16 AND vb<>15 AND vb<>36
) THEN  LET r=26: GO TO 30
 235 GO TO 1000+vb*100
1000 LET no=no-MOB: POKE 64115,n
o
1002 IF PEEK f<>4 THEN  GO TO 10
80
1004 IF PEEK (f+24)=1 AND PEEK (
f+21)=0 AND no=5 THEN  LET r=75:
 GO TO 30
1005 IF (PEEK (f+24)+PEEK (f+21)
<>2) AND no=5 THEN  LET r=75: GO
 TO 30
1006 IF no=6 AND PEEK (f+24)=1 T
HEN  POKE (f+24),0: POKE (f+12),
1: LET r=80: GO TO 30
1008 POKE (f+24),0
1080 IF ((PEEK f=15 AND no=3) OR
 (PEEK f=16 AND no=4)) AND PEEK
(f+32)=0 THEN  LET r=101: GO TO
30
1090 RANDOMIZE USR 65005
1092 IF PEEK 64115=0 THEN  LET r
=13: GO TO 30
1093 POKE f,PEEK 64115
1094 GO TO 100
1100 IF no<29 THEN  GO TO 1150
1102 IF PEEK f=1 AND no=54 THEN
 LET r=14: GO TO 30
1104 IF PEEK f=12 AND no=55 THEN
  LET r=14: GO TO 30
1106 IF PEEK f=5 AND no=38 THEN
 LET r=19: GO TO 30
1108 IF PEEK f=19 AND no=43 THEN
  LET r=20: GO TO 30
1110 IF PEEK f=18 AND no=52 THEN
  LET r=19: GO TO 30
1112 IF PEEK f=17 AND no=48 THEN
  LET r=20: GO TO 30
1114 IF PEEK f=3 AND (no=33 OR n
o=34) THEN  LET r=20: GO TO 30
1116 IF no=60 THEN  LET r=109: G
O TO 30
1140 GO TO 20
1150 IF PEEK (o+no)=99 THEN  LET
 r=17: GO TO 30
1151 IF PEEK f=10 AND no=20 AND
PEEK (f+26)=0 THEN  POKE (f+26),
1: POKE (o+20),10: LET r=23: GO
SUB 10: LET r=57: GO SUB 10
1152 IF PEEK (o+no)<>PEEK f THEN
  LET r=16: GO TO 30
1153 IF PEEK f=4 AND PEEK (f+24)
=1 AND no=4 THEN  LET r=20: GO S
UB 10: LET r=52: GO TO 30
1154 IF PEEK f=4 AND PEEK (f+24)
=1 THEN  LET r=103: GO TO 30
```

```
1155 IF (no=4 OR no=25) AND PEEK
 (f+9)=0 THEN  LET r=14: GO TO 3
0
1156 IF (no=4 OR no=25) AND PEEK
 (f+99)<>0 THEN  LET r=18: GO TO
 30
1158 IF (PEEK (o+4)=99 OR PEEK (
o+25)=99) THEN  LET r=40: GO TO
30
1160 IF ((no=22 AND PEEK f=8) OR
 (no=23 AND PEEK f=6)) THEN  LET
 r=20: GO TO 30
1180 IF PEEK (f+99)>=MAX THEN  L
ET r=5: GO TO 30
1181 IF PEEK f=3 AND PEEK (f+29)
=0 AND no=8 THEN  POKE (f+29),1:
 POKE (o+8),0: POKE (f+9),1: LET
 no=21
1182 POKE (o+no),99: POKE (f+99)
,PEEK (f+99)+1: POKE zz,PEEK zz-
1
1185 IF r=57 THEN  GO TO 195
1186 LET r=23: GO TO 30
1200 IF no=60 THEN  GO TO 1240
1201 IF no>28 THEN  LET r=20: GO
 TO 30
1202 IF PEEK (o+no)<>99 THEN  LE
T r=17: GO TO 30
1204 IF no<>27 THEN  GO TO 1220
1205 IF PEEK zz>=6 THEN  LET r=1
11: GO TO 30
1206 POKE (o+27),0: POKE (o+6),P
EEK f: POKE (f+6),0: POKE (f+99)
,PEEK (f+99)-1: POKE zz,PEEK zz+
1
1208 IF PEEK f=1 THEN  POKE f,2:
 POKE (f+12),1
1210 IF PEEK f=12 THEN  POKE f,1
1: POKE (f+12),1
1212 LET r=22: GO TO 30
1220 IF (no=24 OR no=28) THEN  L
ET r=20: GO SUB 10: LET r=50: GO
 TO 30
1222 IF (no=22 OR no=23) THEN  G
O TO 4200
1224 IF PEEK zz>=6 THEN  LET r=1
11: GO TO 30
1230 POKE (o+no),PEEK f: POKE (f
+99),PEEK (f+99)-1: POKE zz,PEEK
 zz+1: LET r=23: GO TO 30
1240 IF PEEK (f+99)=0 THEN  LET
r=20: GO SUB 10: LET R=108: GO T
O 30
1241 IF (PEEK f=6 OR PEEK f=8) T
HEN  LET r=112: GO TO 30
1242 IF PEEK (o+27)=99 AND (PEEK
 f=1 OR PEEK f=12) THEN  GO TO 1
206
1246 IF PEEK (o+27)=99 THEN  POK
E (o+27),0: POKE (f+6),0: POKE (
o+6),99: LET r=22: GO SUB 10
1248 IF PEEK (o+26)=99 THEN  POK
E (o+26),0: POKE (o+5),99: POKE
(f+5),0
1250 FOR x=1 TO 23: IF (PEEK zz)
=6 AND PEEK (o+x)=99) THEN  LET
x=23: LET r=111: POKE (f+12),1:
GO TO 30
1251 IF PEEK (o+x)=99 THEN  POKE
 (o+x),PEEK f: POKE (f+99),PEEK
(f+99)-1: POKE zz,PEEK zz+1
1256 NEXT X
1258 LET r=110: GO TO 30
1300 IF no<29 THEN  GO TO 1352
1302 IF PEEK f=17 AND no=48 AND
PEEK (f+25)=0 THEN  POKE (f+25),
1: POKE (o+10),17: LET r=56: GO
TO 30
1303 IF PEEK f=17 AND no=48 THEN
  LET r=48: GO TO 30
1304 IF PEEK f=3 AND no=49 AND P
EEK (f+13)=1 AND PEEK (f+31)=0 T
HEN  POKE (f+31),1: POKE (o+3),3
: POKE zz,PEEK zz+1: LET r=35: G
O TO 30
1305 IF PEEK f=3 AND no=49 AND P
EEK (f+31)=1 THEN  LET r=40: GO
TO 30
1306 IF PEEK f=3 AND no=33 AND P
EEK (f+20)=0 THEN  POKE (f+20),1
: POKE (o+5),3: POKE zz,PEEK zz+
1: LET r=36: GO TO 30
1307 IF PEEK f=3 AND no=33 THEN
 LET r=48: GO TO 30
1308 IF PEEK f=12 AND no=55 AND
PEEK (f+17)=0 THEN  LET r=41: GO
 TO 30
1309 IF PEEK f=12 AND no=55 THEN
  LET r=59: GO TO 30
1310 IF PEEK f=10 AND (no=56 OR
no=32) AND PEEK (f+26)=0 THEN  L
ET r=95: GO TO 30
1312 IF PEEK f=19 AND no=43 AND
PEEK (f+27)=0 THEN  POKE (f+27),
1: POKE (o+19),19: LET r=58: GO
TO 30
1313 IF PEEK f=19 AND no=43 THEN
  LET r=48: GO TO 30
1314 IF PEEK f=1 AND no=54 AND P
EEK (f+11)=0 THEN  LET r=72: GO
TO 30
1316 IF PEEK f=1 AND no=54 THEN
 LET r=59: GO TO 30
1318 IF PEEK f=3 AND no=34 AND P
EEK (f+13)=0 THEN  LET r=60: GO
TO 30
1320 IF PEEK f=3 AND no=34 THEN
 LET r=34: GO TO 30
1322 IF PEEK f=16 AND no=46 THEN
  LET r=61: GO TO 30
1323 IF PEEK f=10 AND no=51 AND
PEEK (f+26)=0 THEN  LET r=75: GO
 TO 30
1324 IF PEEK f=10 AND no=51 AND
PEEK (f+28)=0 THEN  LET r=62: GO
 TO 30
1326 IF PEEK f=10 AND no=51 THEN
  LET r=59: GO TO 30
1328 IF no=32 AND ((PEEK f<>16 A
ND PEEK f<>18)) THEN  LET r=94:
POKE (f+12),1: GO TO 30
1330 IF ((no=30 AND (PEEK f=4 OR
 PEEK f=7)) OR (no=29 AND PEEK f
=1) OR (no=39 AND PEEK f=12)) TH
EN  LET r=94: POKE (f+12),1: GO
TO 30
1332 IF ((no=40 AND PEEK f=13) O
R (no=41 AND PEEK f=14) OR no=44
 AND PEEK f=19) THEN  LET r=94:
POKE (f+12),1: GO TO 30
1334 IF ((no=58 AND PEEK f=5) OR
 (no=56 AND PEEK f=10) OR (no=45
 AND PEEK f=18) OR (no=47 AND PE
EK f=17)) THEN  LET r=94: POKE (
f+12),1: GO TO 30
1336 IF ((PEEK f=6 AND no=36) OR
 (PEEK f=8 AND no=37)) THEN  LET
 r=96: GO TO 30
1338 IF (PEEK f=15 OR PEEK f=16)
 AND no=53 AND PEEK (f+32)=0 THE
N  LET r=101: GO TO 30
1340 IF (PEEK f=15 OR PEEK f=16)
 AND no=53 THEN  LET r=102: GO T
O 30
1341 IF PEEK f=18 AND no=52 AND
PEEK (f+19)=0 THEN  LET r=72: GO
 TO 30
1342 IF PEEK f=18 AND no=52 THEN
  LET r=42: GO TO 30
1343 IF PEEK f=5 AND no=38 THEN
 LET r=72: GO TO 30
1344 IF PEEK f=12 AND no=59 AND
PEEK (f+17)=0 THEN  LET r=54: GO
 TO 30
1345 IF PEEK f=12 AND no=59 AND
PEEK (f+17)=1 THEN  LET r=54: GO
 TO 30
1346 IF PEEK f=1 AND no=59 AND P
EEK (f+11)=0 THEN  LET r=100: GO
 TO 30
1347 IF PEEK f=1 AND no=59 AND P
EEK (f+11)=1 THEN  LET r=59: GO
TO 30
1348 IF no=61 AND PEEK (f+22)=1
THEN  LET r=113: GO TO 30
1349 IF no=61 THEN  LET r=114+PE
EK 23290: GO TO 30
1351 GO TO 20
1352 IF (PEEK (o+no)<>99 AND PEE
K (o+no)<>PEEK f) THEN  LET r=75
: GO TO 30
1353 IF (no=8 OR no=21) THEN  LE
T r=81: GO TO 30
1354 IF (no=7 OR no=28) THEN  LE
T r=93: GO TO 30
1356 IF no=6 AND PEEK (f+10)=0 T
HEN  LET r=25: GO TO 30
1358 IF no=17 THEN  LET r=105: G
O TO 30
1360 IF no=18 THEN  LET r=106: G
O TO 30
1390 LET r=72: GO TO 30
1400 IF PEEK f=4 AND no=5+MOB TH
EN  LET r=51: GO TO 30
1402 GO TO 100
1500 CLS
1501 IF PEEK (f+22)=1 THEN  PRIN
T AT 4,1;: LET r=116: GO SUB 10
1502 PRINT AT 6,0: RANDOMIZE USR
 PRCAR
1503 PRINT  PAPER 1; INK 7; FLAS
H 1;AT 21,3;" Press a key to con
tinue "
1504 PAUSE 10: PAUSE 0
1514 GO TO 100
1602 LET res=1: RANDOMIZE USR QU
IT
1700 RANDOMIZE USR SA
1800 RANDOMIZE USR LO
1900 IF PEEK f=1 AND no=54 AND P
EEK (f+11)=0 THEN  LET r=38: GO
TO 30
1902 IF PEEK f=3 AND no=34 AND P
EEK (f+13)=0 THEN  POKE (f+13),1
: LET r=34: GO TO 30
1904 IF PEEK f=3 AND no=4 AND PE
EK (f+29)=0 THEN  POKE (f+4),1:
POKE (o+8),3: POKE (o+4),0: POKE
 (o+25),3: POKE zz,PEEK zz+1: LE
T r=30: GO TO 30
1905 IF no=4 AND (PEEK (o+4)=99
OR PEEK (o+4)=PEEK f) THEN  LET
r=71: GO TO 30
1906 IF no=25 AND (PEEK (o+25)=9
9 OR PEEK (o+25)=PEEK f) THEN  L
ET r=59: GO TO 30
1908 IF PEEK f=5 AND no=38 AND P
EEK (f+16)=0 THEN  POKE (f+16),1
: POKE (o+11),5: LET r=31: GO TO
 30
1909 IF no=4 AND PEEK (o+4)=PEEK
 f AND PEEK (f+29)=1 THEN  POKE
(f+4),1: POKE (o+4),0: POKE (o+2
5),PEEK f: LET r=23: GO TO 30
1910 IF PEEK f=18 AND no=52 AND
PEEK (f+19)=0 THEN  POKE (f+19),
1: POKE (o+18),18: LET r=33: GO
TO 30
1912 IF no=5 AND PEEK (o+5)=99 A
ND PEEK (f+5)=0 THEN  POKE (f+5)
,1: POKE (o+5),0: POKE (o+26),PE
EK f: POKE (o+9),99: POKE zz,PEE
K zz+1: LET r=47: GO TO 30
1914 IF no=5 AND PEEK (o+5)=PEEK
 f AND PEEK (f+5)=0 THEN  POKE (
f+5),1: POKE (o+5),0: POKE (o+26
),PEEK f: POKE (o+9),PEEK f: POK
E zz,PEEK zz+1: LET r=29: GO TO
30
1915 IF PEEK f=10 AND no=51 AND
PEEK (f+26)=0 THEN  LET r=75: GO
 TO 30
1916 IF PEEK f=10 AND no=51 AND
PEEK (f+28)=0 THEN  POKE (f+28),
1: POKE (o+16),10: LET r=63: GO
TO 30
1918 IF PEEK f=10 AND no=51 THEN
  LET r=59: GO TO 30
1920 IF PEEK f=4 AND no=50 AND P
EEK (f+24)=0 THEN  LET r=70: GO
TO 30
1922 IF PEEK f=4 AND no=50 AND P
EEK (f+21)=0 THEN  POKE (f+21),1
: LET r=23: GO SUB 30: LET r=46:
 GO TO 30
1924 IF PEEK f=4 AND no=50 THEN
 LET r=20: GO SUB 10: LET r=59:
GO TO 30
1926 IF PEEK f=12 AND (no=55 OR
no=57) AND PEEK (f+17)=0 AND PEE
K (o+10)<>99 THEN  LET r=73: GO
TO 30
1928 IF PEEK f=12 AND (no=55 OR
no=57) AND PEEK (f+17)=0 AND PEE
K (o+10)=99 THEN  POKE (f+17),1:
 POKE (o+2),12: LET r=74: GO TO
30
1930 IF PEEK f=12 AND (no=55 OR
no=57) THEN  LET r=59: GO TO 30
1932 IF no=19 AND PEEK (o+no)=99
 THEN  GO TO 3400
1934 IF (PEEK f=15 OR PEEK f=16)
 AND no=53 AND PEEK (f+32)=0 THE
N  POKE (f+32),1: LET r=23: GO S
UB 10: LET r=102: GO TO 30
1936 IF (PEEK f=15 OR PEEK f=16)
 AND no=53 THEN  LET r=20: GO SU
B 10: LET r=102: GO TO 30
1938 IF PEEK f=19 AND no=51 THEN
  LET r=85: GO SUB 10: PAUSE 80:
 LET r=86: GO TO 30
1990 GO TO 20
2000 IF no=25 AND PEEK (o+25)=99
 THEN  POKE (f+4),0: POKE (o+25)
,0: POKE (o+4),99: LET r=23: GO
TO 30
2004 IF no=25 AND PEEK (o+25)=PE
EK f THEN  POKE (f+4),0: POKE (o
+25),0: POKE (o+4),PEEK f: LET r
=23: GO TO 2020
2006 IF no=4 AND (PEEK (o+4)=99
OR PEEK (o+4)=PEEK f) THEN  LET
r=20: GO TO 30
2008 IF (PEEK f=15 OR PEEK f=16)
 AND no=53 AND PEEK (f+32)=1 THE
N  POKE (f+32),0: LET r=23: GO S
UB 10: POKE (f+12),1: LET r=101:
 GO TO 30
2010 IF (PEEK f=15 OR PEEK f=16)
 AND no=53 THEN  LET r=20: GO SU
B 10: LET r=101: GO TO 30
2012 IF ((PEEK f=1 AND no=54 AND
 PEEK (f+11)=1) OR (PEEK f=1 AND
 no=58)) THEN  LET r=71: GO TO 3
0
2013 IF ((PEEK f=4 AND no=50 AND
 PEEK (f+21)=1 AND PEEK (f+24)=1
) OR (PEEK f=3 AND no=34 AND PEE
K (f+13)=1)) THEN  LET r=71: GO
TO 30
2014 IF ((no=26 AND (PEEK (o+no)
=99 OR PEEK (o+no)=PEEK f)) OR (
PEEK f=10 AND no=51 AND PEEK (f+
28)=1)) THEN  LET r=71: GO TO 30
2015 IF ((PEEK f=5 AND no=38 AND
 PEEK (f+16)=1) OR (PEEK f=18 AN
D no=52 AND PEEK (f+19)=1)) THEN
  LET r=71: GO TO 30
2016 IF (PEEK f=12 AND no=55 AND
 PEEK (f+17)=1) THEN  LET r=71:
GO TO 30
2017 IF PEEK f=10 AND no=51 AND
PEEK (f+26)=1 AND PEEK (f+28)=0
THEN  LET r=20: GO SUB 10: LET r
=60: GO TO 30
2018 GO TO 20
2020 IF PEEK f=3 AND PEEK (o+8)=
3 AND PEEK (f+29)=0 THEN  POKE (
o+8),0
2022 GO TO 30
2100 IF no>28 THEN  LET r=20: GO
 TO 30
2102 IF ((no=24 OR no=28) OR (no
=11 AND PEEK (f+22)=1)) THEN  LE
T r=48: GO TO 30
2104 IF no=11 AND PEEK (o+11)<>9
9 THEN  LET r=17: GO TO 30
2106 IF (no=11 AND PEEK 64107<>6
7) THEN  LET r=49: GO TO 30
2108 IF (no<>3 AND no<>7 AND no<
>21 AND no<>20) THEN  LET r=20:
GO TO 30
2109 IF PEEK (o+no)<>99 THEN  LE
T r=17: GO TO 30
2110 IF no=3 THEN  POKE (f+3),1:
 POKE (o+3),0: POKE (o+24),99: P
OKE (f+99),PEEK (f+99)-1: POKE (
f+23),PEEK (f+23)+1: LET r=27: G
O TO 30
2112 IF no=7 THEN  POKE (f+7),1:
 POKE (o+7),0: POKE (o+20),99: P
OKE (f+99),PEEK (f+99)-1: POKE (
f+23),PEEK (f+23)+1: LET r=23: G
O TO 30
2114 IF (no=21 OR no=20) THEN  L
ET r=85: GO SUB 10: PAUSE 50: LE
T r=86: GO TO 30
2116 GO TO 20
2400 IF PEEK f=5 AND (no=31 OR n
o=33) THEN  LET r=87: GO TO 30
2402 IF ((PEEK f=12 AND no=55) O
R (PEEK f=1 AND no=54) OR (PEEK
f=19 AND no=43)) THEN  LET r=87:
 GO TO 30
2404 IF (no=4 OR no=25) AND PEEK
 (o+no)=PEEK f THEN  LET r=87: G
O TO 30
2405 IF PEEK f=10 AND no=20 AND
PEEK (f+26)=0 THEN  POKE (f+26),
1: POKE (o+20),10: LET r=23: GO
SUB 10: LET r=57: GO TO 30
2406 GO TO 20
2500 IF (no=4 OR no=25) THEN  GO
 TO 4100
2501 IF PEEK f=4 AND no=MOB+5 AN
D PEEK (o+4)=4 AND PEEK (f+24)=0
 THEN  LET no=4: GO TO 4100
2502 IF (PEEK f<>20 AND PEEK f<>
12) AND no=35 THEN  LET r=20: GO
 TO 30
2504 IF no=(MOB+6) THEN  GO TO 1
000
2506 IF no=95 THEN  LET r=90: GO
 TO 30
2508 LET no=(MOB+5): GO TO 1000
2600 IF (no<>35 AND no<>98) THEN
  GO TO 20
2602 IF no=35 AND (PEEK f<>4 AND
 PEEK f<>10) THEN  LET r=20: GO
TO 30
2604 IF PEEK f=4 AND PEEK (f+24)
=1 AND (no=4 OR no=98) THEN  POK
E (f+24),0: POKE (f+12),1: LET r
=80: GO TO 30
2606 LET no=(MOB+6): GO TO 1000
2700 IF no<>11 THEN  LET r=20: G
O TO 30
2702 IF PEEK (o+11)<>99 THEN  LE
T r=17: GO TO 30
2704 IF PEEK (f+22)=1 THEN  LET
r=48: GO TO 30
2706 POKE (f+23),PEEK (f+23)+1:
POKE (f+22),1: LET r=89: GO SUB
10: PAUSE 30: LET r=28: GO TO 30
2800 IF no>28 THEN  LET r=20: GO
 TO 30
2802 IF PEEK (o+16)<>99 THEN  LE
T r=88: GO TO 30
2804 IF (no=17 OR no=18) AND PEE
K (o+no)=99 THEN  LET r=84: GO T
O 30
2806 IF no=21 AND PEEK (o+21)=99
 THEN  LET r=82+PEEK 23290: GO T
O 30
2808 GO TO 20
2900 IF no<>15 THEN  LET r=20: G
O TO 30
2902 IF PEEK (o+15)<>99 THEN  LE
T r=17: GO TO 30
2904 IF PEEK (o+6)<>99 THEN  LET
 r=15: GO TO 30
2906 POKE (o+15),0: POKE (f+10),
1: POKE (f+99),PEEK (f+99)-1: LE
T r=23: GO TO 30
3000 IF no=27 AND PEEK (o+27)=99
 THEN  LET r=24: GO TO 30
3001 IF no=6 AND PEEK (o+6)<>99
THEN  LET r=17: GO TO 30
3002 IF no=6 AND PEEK (f+10)=0 T
HEN  LET r=25: GO TO 30
3003 IF no<>6 THEN  LET r=20: GO
 TO 30
3004 IF no=6 THEN  POKE (f+6),1:
 POKE (o+6),0: POKE (o+27),99
3006 IF PEEK f=2 THEN  POKE f,1:
 GO TO 100
3008 IF PEEK f=11 THEN  POKE f,1
2: GO TO 100
3010 LET r=21: GO TO 30
3100 IF no=6 AND PEEK (o+6)=99 T
HEN  LET r=36: GO TO 30
3102 IF no=6 THEN  LET r=17: GO
TO 30
3104 IF no<>27 THEN  LET r=20: G
O TO 30
3106 POKE (f+6),0: POKE (o+6),99
: POKE (o+27),0
3108 IF PEEK f=1 THEN  POKE f,2:
 GO TO 100
3110 IF PEEK f=12 THEN  POKE f,1
1: GO TO 100
3112 LET r=23: GO TO 30
3200 IF no=96 THEN  LET r=99: GO
 TO 30
3202 IF no>28 THEN  GO TO 1300
3204 IF PEEK (o+no)=99 THEN  LET
 r=100: GO TO 30
3206 GO TO 20
3300 LET r=85: GO SUB 10: PAUSE
50: LET r=86: GO TO 30
3400 IF (no<>14 AND no<>19) THEN
  LET r=20: GO TO 30
3402 IF PEEK (o+no)<>99 THEN  LE
T r=17: GO TO 30
3404 IF no=14 THEN  LET r=78: GO
 TO 30
3406 IF no=19 THEN  LET r=79: GO
 TO 30
3500 IF (no=22 OR no=23) AND PEE
K (o+no)=99 THEN  LET r=48: GO T
O 30
3501 IF (no<>1 AND no<>2) THEN
LET r=20: GO TO 30
3502 LET yy=0
3503 FOR x=16 TO 18
3504 IF PEEK (o+x)=99 THEN  LET
yy=yy+1
3505 NEXT x
3506 IF yy=3 THEN  GO TO 3520
3507 IF PEEK (o+no)<>99 THEN  LE
T r=17: GO TO 30
3508 LET r=75: GO SUB 10
3509 IF yy=0 THEN  GO TO 195
3510 IF PEEK (o+17)<>99 THEN  LE
T r=76: BEEP .5,20: GO SUB 10
3512 IF PEEK (o+18)<>99 THEN  LE
T r=77: BEEP .5,20: GO SUB 10
3514 IF PEEK (o+16)<>99 THEN  LE
T r=88: BEEP .5,20: GO SUB 10
3516 GO TO 195
3520 IF PEEK (o+no)<>99 THEN  LE
T r=17: GO TO 30
3524 IF no=1 THEN  POKE (o+1),0:
 POKE (f+1),1: POKE (o+22),99: L
ET r=89: GO SUB 10: PAUSE 20: LE
T r=91: GO TO 30
3526 IF no=2 THEN  POKE (o+2),0:
 POKE (u+23),99: POKE (f+2),1: L
ET r=89: GO SUB 10: PAUSE 20: LE
T r=92: GO TO 30
3530 GO TO 20
3600 IF no<>12 THEN  LET r=20: G
O TO 30
3602 IF PEEK (o+12)<>99 THEN  LE
T r=17: GO TO 30
3604 POKE (o+12),0: POKE (o+13),
99: POKE (f+15),1: LET r=23: GO
TO 30
3800 GO TO 20
3900 IF PEEK f=12 AND no=55 THEN
  LET r=54: GO TO 30
3902 IF PEEK f<>1 THEN  LET r=53
: GO TO 30
3904 IF no=54 AND PEEK (f+11)=0
AND PEEK (o+9)=99 THEN  POKE (f+
11),1: POKE (o+1),1: LET r=32: G
O TO 30
3906 IF no=54 AND PEEK (f+11)=0
AND PEEK (o+9)<>99 THEN  LET r=5
5: GO TO 30
3908 GO TO 20
4000 IF (no=11 AND PEEK 64107=67
) THEN  GO TO 20
4001 IF ((no=24 OR no=28) OR ((n
o=11 OR no=61) AND PEEK (f+22)=1
)) THEN  LET r=20: GO SUB 10: LE
T r=50: GO TO 30
4002 IF PEEK f=3 AND no=8 THEN
POKE (f+9),1: POKE (f+29),1: POK
E (o+8),0: POKE (o+21),3: LET r=
117: GO TO 30
4004 IF (no=3 OR no=7 OR (no=11
AND PEEK (f+22)=0)) THEN  LET r=
20: GO TO 30
4006 GO TO 20
4100 IF (no=4 OR no=25) AND PEEK
 (o+no)=99 THEN  LET r=65: GO TO
 30
4102 IF (no=4 OR no=25) AND PEEK
 (o+no)<>PEEK f THEN  LET r=66:
GO TO 30
4104 IF no=25 THEN  LET r=68: GO
 TO 30
4105 IF no<>4 THEN  LET r=15: GO
 TO 30
4106 IF PEEK f<>4 THEN  LET r=67
: GO TO 30
4108 IF PEEK (f+24)=0 THEN  POKE
 (f+24),1: LET r=69: POKE (f+12)
,1: GO TO 30
4110 LET r=48: GO SUB 10: LET r=
52: GO TO 30
4200 IF (no<>22 AND no<>23) THEN
  GO TO 1300
4202 IF PEEK (o+no)<>99 THEN  LE
T r=17: GO TO 30
4204 IF ((no=22 AND PEEK f=6) OR
 (no=23 AND PEEK f=8)) THEN  LET
 r=20: GO TO 30
4206 IF PEEK f=6 AND no=23 THEN
 POKE (f+30),PEEK (f+30)+1: LET
r=89: GO SUB 10
4208 IF PEEK f=8 AND no=22 THEN
 POKE (f+30),PEEK (f+30)+1: LET
r=89: GO SUB 10
4212 POKE (o+no),PEEK f: POKE (f
+99),PEEK (f+99)-1
4214 IF PEEK (f+30)=2 THEN  GO S
UB 8200: PAUSE 50: CLS : PRINT A
T 8,0: LET r=97: GO SUB 10: PAUS
E 50: PRINT : PRINT : GO SUB 820
0: LET r=96: GO SUB 10: PAUSE 50
: GO TO 1402
4216 IF (PEEK f<>6 AND PEEK f<>8
) THEN  LET r=23: GO TO 30
4218 GO TO 195
4500 IF PEEK f=12 AND (no=57 OR
no=58) THEN  GO TO 1926
4502 IF PEEK f=1 AND (no=57 OR n
o=58) AND PEEK (f+11)=0 AND PEEK
 (o+10)=99 THEN  LET r=104: GO T
O 30
4504 GO TO 20
4600 IF PEEK f=4 AND (no=4 OR no
=25) THEN  GO TO 4100
4602 IF no=35 THEN  GO TO 2500
4603 IF no=97 THEN  LET no=MOB+5
: GO TO 2500
4604 GO TO 20
4700 IF no>28 THEN  LET r=20: GO
 TO 30
4702 IF PEEK (o+no)<>99 THEN  LE
T r=17: GO TO 30
4704 LET r=107: GO TO 30
4800 IF no=98 AND PEEK f=3 THEN
 LET r=87: GO TO 30
4802 IF no<>98 THEN  GO TO 20
4804 LET r=112: GO TO 30
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4900 IF no<>97 THEN  GO TO 20
4902 LET r=87: GO TO 30
7000 CLS : PRINT  PAPER 7; INK 2
;AT 0,5;" CHRISTMAS ADVENTURE "
7001 PRINT  INK 6;AT 8,0;"You ma
y play the HERO(?) of thisadvent
ure as either the Ron or  Nancy"
7002 PRINT  INK 7;AT 12,5;"Enter
 "R" for RON              or "N
 for NANCY."
7003 INPUT a$
7004 IF a$="N" THEN  POKE 23298,
1: GO TO 7009
7005 IF a$="R" THEN  GO TO 7009
7006 GO TO 7000
7009 RETURN
7010 IF PEEK (o+27)<>99 THEN  PO
KE f,2: GO TO 7655
7011 GO SUB 7655
7012 IF PEEK (f+11)=1 THEN  LET
r=45: GO TO 10
7013 RETURN
7020 GO TO 7655
7030 GO SUB 7655
7031 IF PEEK (f+13)=1 THEN  LET
r=39: GO TO 10
7032 RETURN
7040 GO SUB 7655
7041 IF PEEK (f+24)=1 THEN  LET
r=52: GO SUB 10
7042 IF PEEK (f+21)=1 THEN  LET
r=46: GO TO 10
7043 RETURN
7050 GO SUB 7655
7051 IF PEEK (f+16)=1 THEN  LET
r=43: GO TO 10
7052 RETURN
7060 GO SUB 7655
7061 IF PEEK (o+2)=99 THEN  PRIN
T AT 6,0: LET res=1: LET r=12: G
O TO 30
7062 IF PEEK (f+23)<>3 THEN  LET
 res=1: LET r=11: PRINT AT 6,0:
GO TO 30
7063 IF PEEK (f+15)=1 THEN  LET
res=1: PRINT AT 6,0: LET r=10: G
O TO 30
7069 RETURN
7070 GO TO 7655
7080 GO SUB 7655
7081 IF PEEK (o+1)=99 THEN  LET
res=1: PRINT AT 6,0: LET r=12: G
O TO 30
7082 IF PEEK (f+23)<>3 THEN  LET
 res=1: LET r=11: PRINT AT 6,0:
GO TO 30
7083 IF PEEK (f+15)=1 THEN  LET
res=1: PRINT AT 6,0: LET r=10: G
O TO 30
7089 RETURN
7090 GO TO 7655
7100 IF PEEK 23298=1 THEN  POKE
f,24: GO SUB 7655: POKE f,10: GO
 TO 7102
7101 GO SUB 7655
7102 IF PEEK (f+26)=0 THEN  LET
r=95: GO SUB 10
7103 IF PEEK (f+26)=1 AND PEEK (
f+28)=0 THEN  LET r=57: GO SUB 1
0
7104 IF PEEK (f+28)=1 THEN  LET
r=64: GO TO 10
7109 RETURN
7110 GO TO 7655
7120 IF PEEK (o+27)<>99 THEN  PO
KE f,11: GO TO 7655
7121 GO SUB 7655
7122 IF PEEK (f+17)=1 THEN  LET
r=44: GO TO 10
7123 RETURN
7140 GO TO 7655
7150 GO SUB 7655
7151 IF PEEK (f+32)=1 THEN  LET
r=102: GO TO 10
7159 RETURN
7160 IF PEEK 23298=1 THEN  POKE
f,22: GO SUB 7655: POKE f,16: GO
 TO 7162
7161 GO SUB 7655
7162 IF PEEK (f+32)=1 THEN  LET
r=102: GO TO 10
7169 RETURN
7170 IF PEEK 23298=1 THEN  POKE
f,23: GO SUB 7655: POKE f,17: RE
TURN
7171 GO TO 7655
7180 GO SUB 7655
7181 IF PEEK (f+19)=1 THEN  LET
r=42: GO TO 10
7182 RETURN
7655 RANDOMIZE USR PRIN: RETURN
8000 RESTORE 8010
8001 CLS : PRINT  INK 6;AT 8,8;"
Just a moment!"
8002 FOR x=1 TO 21: BEEP .01,x:
READ d: POKE f+x+40,d: NEXT x
8003 CLS
8004 RETURN
8010 DATA 1,0,1,0,1,0,0,0,1,2,0,
1,1,2,0,1,1,1,1,0,1
8200 FOR x=-5 TO 15: BEEP .01,x:
 NEXT x
8202 FOR x=14 TO -5 STEP -1: BEE
P .01,x: NEXT x
8210 RETURN
9900 LOAD ""CODE
9902 BORDER 0: PAPER 0: INK 7: B
RIGHT 1: CLS
9904 PRINT  PAPER 7; INK 2;AT 0,
5;" CRISIS AT CHRISTMAS "
9906 PRINT AT 3,0;"It is Christm
as Eve, and the     children are
asleep. In fact,   just about ev
eryone is asleep,  apart from yo
u."
9908 PRINT : PRINT "There are tw
o presents that mustbe found and
 put in their         correct posi
tions in the house."
9910 PRINT : PRINT "Don't forget
 that the kids will be heartbrok
en if they discover that it isn'
t Santa bringing    their gifts.
 You must find a wayof avoiding
this problem."
9912 PRINT : PRINT  PAPER 7; INK
 2;"  YOU DO NOT KNOW WHERE THES
E    PRESENTS HAVE BEEN HIDDEN!
!   "
9940 PRINT  PAPER 7; INK 1; FLAS
H 1;AT 21,5;" Press a key to sta
rt "
9950 PAUSE 10: PAUSE 0
9952 POKE 23658,8: GO SUB 7000
9956 LET f=64200: LET o=64379: L
ET ss=64440
9957 LET MAX=PEEK 64118: LET MOS
=PEEK 64119
9958 LET SAVE=256*PEEK 64117+PEE
K 64116: LET LEN=256*PEEK 64121+
PEEK 64120
9959 LET DMOV=256*PEEK 64125+PEE
K 64124
9960 LET PRIN=256*PEEK 64129+PEE
K 64128: LET TRNO=256*PEEK 64127
+PEEK 64126
9961 POKE 64130,0
9962 LET PRHY=256*PEEK TRNO+PEEK
 (TRNO+1): LET PRMS=256*PEEK (TR
NO+6)+PEEK (TRNO+7)
9963 LET SA=PRMS-95: LET PRCAR=2
56*PEEK (TRNO+2)+PEEK (TRNO+3):
LET SYS=PRIN-24
9964 LET LO=SA-105: LET QUIT=PRM
S+100
9966 LET res=0
9980 RANDOMIZE USR 65050
9984 GO SUB 8000
9989 GO TO 100
9990 SAVE "CHRISTMAS" LINE 9900
9991 SAVE "SYSTEM"CODE SAVE,LEN
```

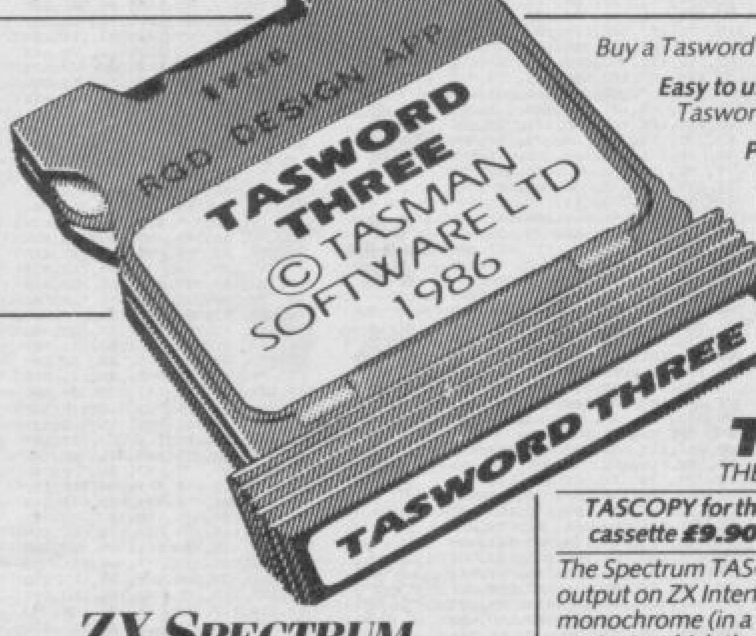
Listing 4

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  0,  0,  0,  0,  0, 62,  3,65
 50,204, 91,205,186,209,205,1150
184,251,  1,  0,  0,205, 61,702
 31,205,191,  2, 33,  0, 92,562
229, 17, 50,  0, 33,200,  1,530
205,181,  3,225, 62, 66,190,932
 32, 20, 33,130,250,175,190,830
 32, 43, 62,  4, 50,204, 91,486
205,196,209, 33,195,  0, 24,852
 34, 62,  7, 50,204, 91,205,655
186,209,205,184,251,  1,  0,1036
  0,205, 61, 31, 55,221, 33,606
130,250, 17,  0,150, 62,255,864
205, 86,  5,205, 22,254, 33,810
100,  0, 34, 66, 92, 62,  1,355
 50, 68, 92,201,  0,205, 10,626
254, 62,  2, 50,204, 91,205,868
186,209,205,184,251,  1,  0,1036
  0,205, 61, 31,205,191,  2,695
 33,  8, 92,229, 17, 50,  0,429
 33,200,  1,205,181,  3,225,848
 62, 66,190, 40, 29, 62,  6,455
 50,204, 91,205,186,209,205,1150
184,251,  1,  0,  0,205, 61,702
 31,221, 33,130,250, 17,150,832
  0, 62,255,205,194,  4, 33,753
195,  0, 34, 66, 92, 62,  1,450
 50, 68, 92, 62,  8, 50,204,534
 91,205,186,209,201,  0,  0,892
  0,  0, 50,204, 91, 71, 33,457
 71,210, 14,  0,126,254,252,927
 56,  5, 12,121,184, 40,  3,421
 35, 24,243,205, 68,220, 35,830
126,254,127, 32,  5,205, 68,817
220, 35,126,254,255,200,254,1352
254, 40,  8,254,253, 40, 55,904
126,215, 24,230, 17, 50,  0,662
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  0,  0,205, 61, 31,205,191,693
  2, 33,  8, 92, 62, 78,190,465
 40, 63, 62, 89,190, 32,225,701
205, 34,254, 62,  1, 50,122,728
251, 33,100,  0, 34, 66, 92,576
 62,  1, 50, 68, 92,201,  1,475
100,  0,205, 61, 31, 17, 50,464
  0, 33,200,  1,205,181,  3,623
  6,  3,197,205,184,251,193,1039
 62, 13,215, 16,246,205,184,941
251, 62,  1, 50,204, 91,195,854
186,209,199,255, 16,  7, 68,940
111, 32,121,111,117, 32,119,643
 97,110,116, 32,116,111, 32,614
116,114,121, 32, 97,103, 97,660
105,110, 67, 32, 40, 89, 47,486
 78, 41, 13,254, 16,  7, 70,479
111,114, 32, 83, 65, 86, 69,560
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107, 32,112,114,101,115,115,696
 32, 66, 32,111,114, 32, 97,484
110, 21, 32,127,111,116,104,721
101,114, 32,107,101,121, 32,608
102,111,114, 32, 83, 65, 86,593
 69, 32,116,111, 32, 84, 97,541
112,101, 46, 13,255, 16,  7,550
 70,111,114, 32, 76, 79, 65,547
 68, 32,102,114,111,109, 32,568
 98, 97,110,107, 32,112,114,670
101,115,115, 32, 66, 32,111,572
114, 32, 32, 32,127, 97,110,544
121, 32,111,116,104,101,114,699
 32,107,101,121, 32,102,111,606
114, 32, 76, 79, 65, 68, 32,466
102,114,111,109, 32, 84, 97,649
112,101, 13,255, 16,  7, 32,536
 32, 70,111, 32, 83, 65, 86,487
 69, 32,104, 97,115, 32, 98,547
101,101,110, 32,112,101,114,671
102,111,114,109,101,100, 32,669
115,111, 32,127, 32, 32, 32,481
 32,116,104,101,114,101, 32,600
105,115, 32,110,111, 32, 68,573
 65, 84, 65, 32,116,111, 32,505
 76, 79, 65, 68, 33, 13,255,589
 16,  7, 89,111,117, 32, 99,471
 97,110, 39,116, 32, 99, 97,590
114,114,121, 32, 97,110,121,709
 32,109,111,114,101, 33, 13,513
255, 16,  7, 83,116, 97,114,608
116, 32,116, 97,112,101, 44,618
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114,101,115,115, 32, 97,110,684
121, 32,107,101,121, 46, 13,541
255, 16,  7, 32, 32, 73,110,525
115,101,114,116, 32, 68, 65,611
 84, 65, 32,116, 97,112,101,607
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TASWORD 128

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Buy a Tasword for your Spectrum and get a word processing program that is:

Easy to use. *Just load the program and type in your text. If you do need help then it's there on the Tasword screen.*

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TASWORD TWO for the ZX 48K Spectrum cassette £13.90 microdrive cartridge £15.40

"Without doubt the best utility I have reviewed for the Spectrum"
HOME COMPUTING WEEKLY APRIL 1984
"If you have been looking for a word processor, then look no further"
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With 64 characters per line on the screen and a host of useful features TASWORD TWO is the ideal cassette based word processing package for the Spectrum owner.

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TASCOPY
THE SCREEN COPIER

TASCOPY for the ZX Spectrum with Interface 1 cassette £9.90 microdrive cartridge £11.40

The Spectrum TASCOPY is for use with the RS232 output on ZX Interface 1. It produces both monochrome (in a choice of two sizes) and large copies in which the different screen colours are printed as different shades. With TASCOPY you can keep a permanent and impressive record of your screen pictures and diagrams. A list of printers supported by TASCOPY is given to the left.

TAS-DIARY
THE ELECTRONIC DIARY

TAS-DIARY for the ZX 48K Spectrum and microdrives. Cassette £9.90

Keep an electronic day-to-day diary on microdrive! TAS-DIARY includes a clock, calendar, and a separate screen display for every day of the year. Invaluable for reminders, appointments, and for keeping a record of your day. The data for each month is stored as a separate microdrive file so that your data for a year is only constrained by the microdrive capacity. TAS-DIARY will work for this year, next year, and every year up to 2100! Supplied on cassette for automatic transfer to microdrive.

TASMAN PRINTER
INTERFACE

TASPRINT PRINTER INTERFACE for the ZX Spectrum £29.90
RS232 Cable for ZX Interface 1 £14.50

Plug into your Spectrum and drive any printer fitted with the Centronics standard parallel interface. Supplied complete with ribbon cable and driving software. The user changeable interface software makes it easy to send control codes to your printer using the method so successfully pioneered with TASWORD TWO. The cassette contains fast machine code high resolution full width SCREEN COPY SOFTWARE for Epson, Mannesmann Tally, Shinwa, Star, Tandy Colour Graphic (in colour!) printers. TASCOPY shaded screen copy software for this interface (value £9.90) is INCLUDED in this package.

The TASCOPIES and TASPRINTS drive all Epson compatible eight pin dot-matrix printers e.g.

		BROTHER M1009
AMSTRAD DMP 2000	NEC PC 8023B-N	BROTHER HR5
EPSON FX-80	MANNESMANN TALLY MT-80	SHINWA CP-80
EPSON RX-80	STAR DMP501/515/5610	DATAC PANTHER
EPSON MX-80 TYPE III	COSMOS-80	DATAC PANTHER II

COMPACTA - bold and heavy, good for emphasis
DATA-RUN - A FUTURISTIC SCRIPT
LECTURA LIGHT - clean and pleasing to read
MEDIAN - a serious business-like script
PALACE SCRIPT - a distinctive flowing font

TASPRINT output shown at less than half-size.



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And if you got this far you're a STAR!!

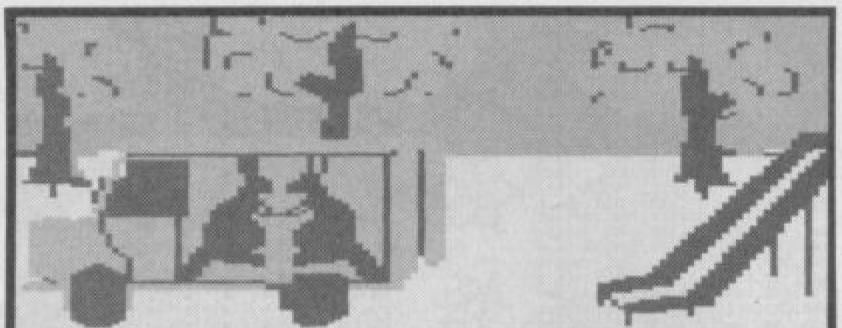
THE ARCHERS

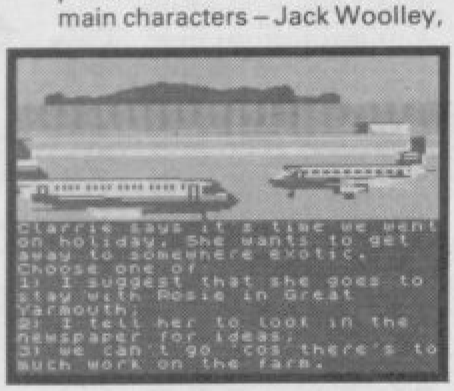
ADVENTURE REVIEW

People get pretty serious about *The Archers*. If you've found your hackles rising at the way Pat has been misrepresented and misunderstood in that patricharchal hotbead of chauvinism, Ambridge, or if your blood boils at the ruthless way Brian led Caroline astray in the cool setting of the Mont Blanc restaurant, don't give up hope – here is a chance to put the record straight on their behalf.

Welcome to **The Archers** – the computer game.

The idea is that you assume the role of a trainee scripwriter on the radio series, and make plot decisions for four of the main characters – Jack Woolley,





Elizabeth Archer, Eddie Grundy and Nelson Gabriel.

It's been programmed by Level 9 and the gameplay works a little line that in its earlier Adrian Mole game. Where **Mole** fell down was with the tedious cycling through of multiple-choice question and answers.

The Archers works basically the same way, but the multiple questions are properly integrated into the plot and the whole thing – unlike **Mole** – really does hang together.

Your success or failure at the game is reflected by the audience ratings which appear on the screen from time to time, together with winging memos from the Controller of Radio 4 – a hard man to please.

Understandable perhaps, since it's he who gets the flack when the delicate sensibilities of **The Archers** listenership are in any way offended. These people mean business. An example: irate civil rights groups inundated the BBC with threatening letters when I unwittingly got Shane fired. When I chose plotline option 'Save on wages' (part of Nelson's economy drive) it was without realising that his most important and – apart from the window cleaner whom you can opt to have drenched with water by Elizabeth Archer – seemingly his only employee, would have to go. Bad move. Shane is Glad To Be Gay and as Bortchester tends not to lead on socio-sexual issues, the last thing CR4 wants is its sole representive of an oppressed minority written out.

The 'writing out' of a character is a subtle business and all too easy for the uninitated to do unwittingly. I thought a nice long holiday in Guernsey would do Jack Woolley the world of good. Up came CR4's angry memo complaining that, as any listener knows, nobody goes on holiday to Guernsey unless they're being written out.

It may seem as though you set out playing God in Ambridge but, as the blurb says, the plot has its own momentum, and events can easily get out of hand. At one point I felt as though the plot was going round and round in circles and, no matter what option I chose, I kept coming back to the same decision point – as Eddie Grundy, my pay rise depended on how well things went with the turkeys. To get more money, either I had to a) tout for business around the village, b) raid Martha's post office or c) raid Joe Grundy's sock drawer. There were moments when it seemed as though I had in fact a very small part in the action and I was just pressing anything to get out of this cycle.

On other occasions the storyline wasn't coherent. Again as Eddie Grundy, I saved the Bank Manager from certain death by whisking him off to hospital, at which point an audience rating came up, followed by my telling Clarrie to look in the newspaper for ideas (a reference to a totally different sub-plot involving holidays) and then a quick switch back to the bank manager.

These mysterious interruptions – by bits of stray text, bugs perhaps? – and the odd textual error detracted a little from an otherwise highly entertaining and very witty game.

My biggest criticism would be the way the text would sometimes disappear off screen before there had been time to read it. Once or twice, ten lines or so of text would just vanish – hurtling off the screen at some absolutely crucial dramatic moment.

The game was great fun though, despite the irritating bugs in the program, and I found myself laughing out loud on a number of occasions – for how many games can that be said? Just how entertaining it would be for non-Archers fans is harder to say.

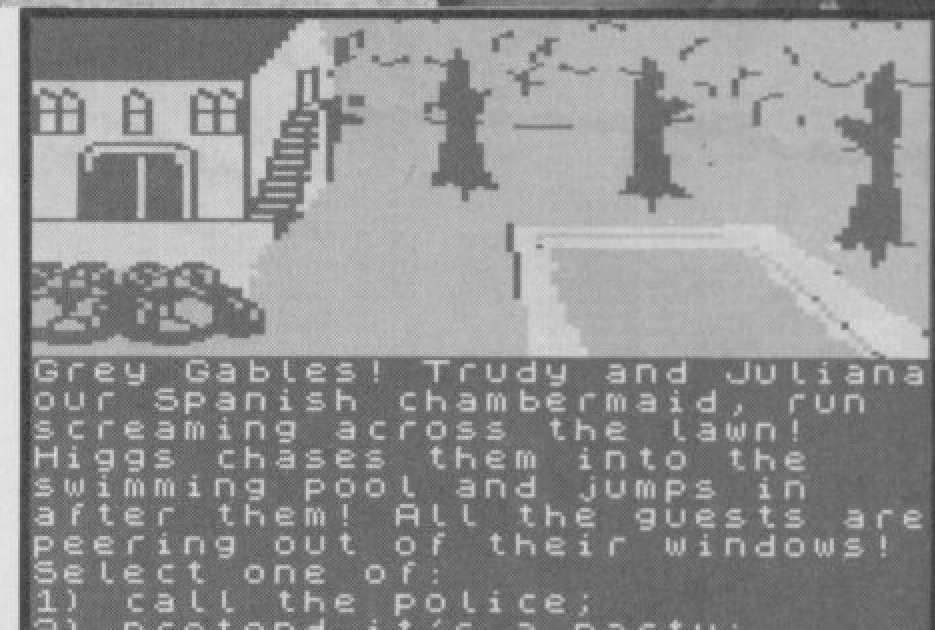
It may not be demanding enough to hold the attention of a hardened adventurer indefinitely, but it's a must for anyone who only comes to life between 10.15 and 11.15 on a Sunday morning■

FACTS BOX

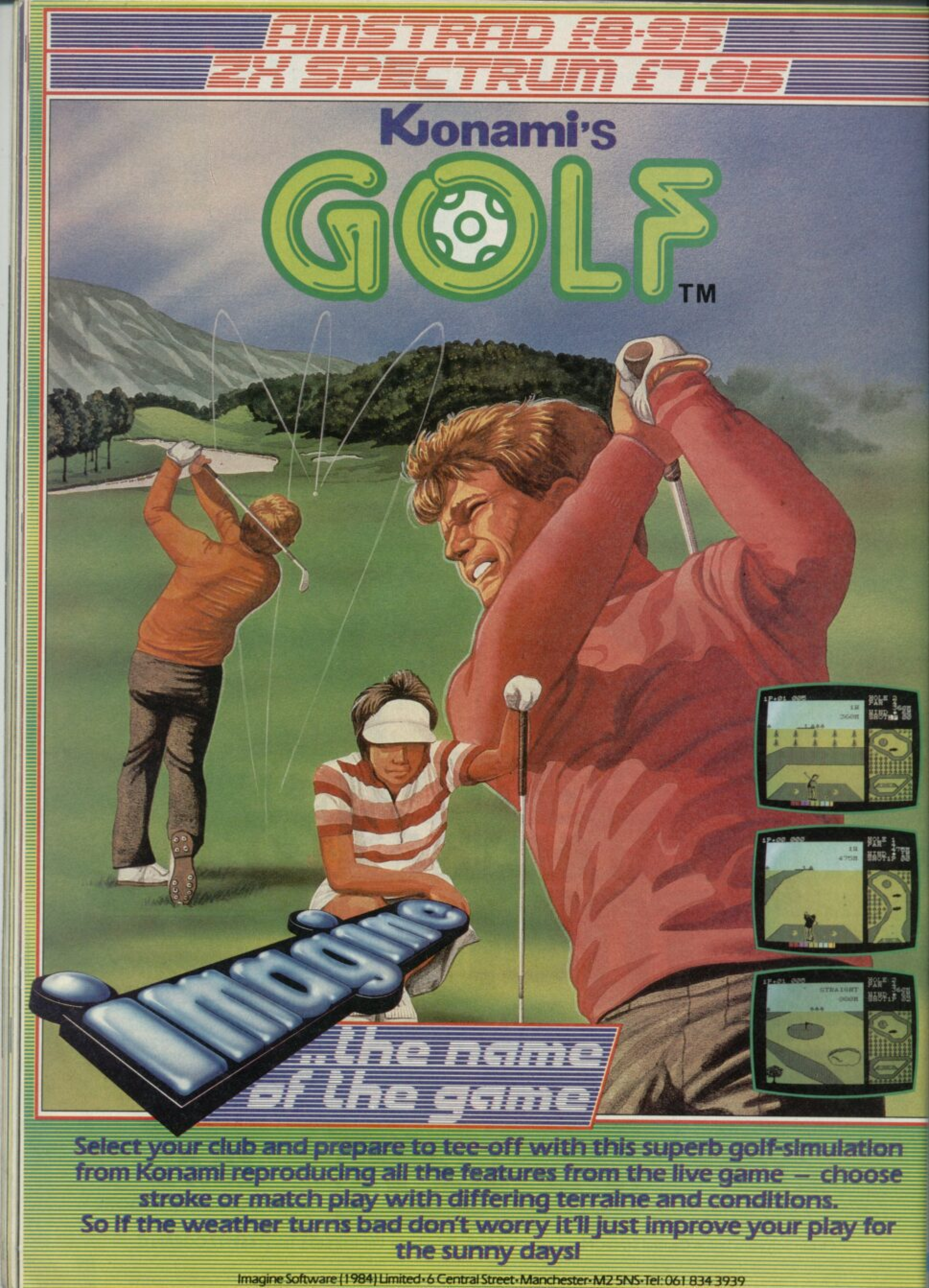
Great in-joke for Archers fans but managed to be funny on its own merits too. Marred a little by some curious mistakes

☆	THE ARCHERS Label: Mosaic
★	Author: Level 9
★	Price: £9.95
★	Memory: 48K/128K
★	Reviewer: Lolita Taylor






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ARCADE REVIEW

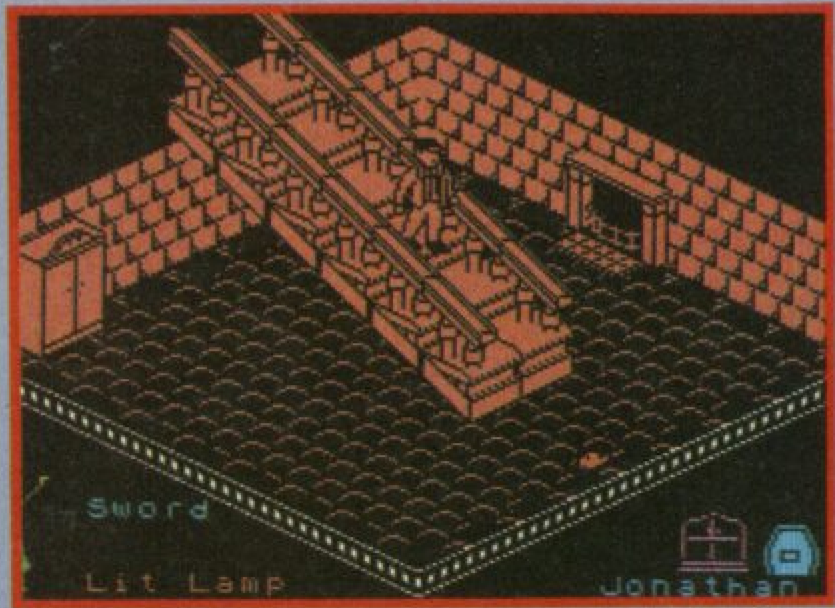
The latest Piranha offering is based on a film starring Klaus Kinski, making it the only piece of software ever to have been licenced from a European art movie.

I bet Piranha didn't have to pay much for the deal.

The film was called Nosferatu, as is the game. If that's unfamiliar perhaps you will recognise it by another name – Dracula. Head honcho in the vampire department.

The game's been created for Piranha by Design Design who have been popping up a lot recently – mainly for Piranha.

Objectively, it's a big game. Three sections loaded in a



NOSFERATU



couple of blocks each a full game in itself. Although the three sections are integrated quite closely it isn't possible to move from section to section without completing at least some parts of the task in the previous section.

A Dracula game could have been done so many ways: a run around dodging things game or an adventure. Perhaps the least expected approach is that it should be turned into a Knight Lore/Batmanish 3D edge-on-big-sprite-epic – but that's just what this is. In the three sections you control one or more characters including, gasp, Lucy (a woman) – each a fully animated figure who can walk around, go down stairs and, well, actually that's about it really. Other activities like getting objects and using the occasional sword seem to happen invisibly. There isn't even a 'jump' option – there are places where you have to climb (notably some ladders in the library) and where you have to descend (various staircases) but it just happens automatically.

It struck me part way through the game that there was almost no reaction element to it at all – it's an arcade adventure where solving the puzzles dominates the play. True, you get attacked by bats on a regular basis but there isn't a lot you can do about it in terms of joystick technique, no matter how you waggle the stick you won't avoid'em. (This is not to say there is nothing you can do, there definitely is, but it doesn't require hot reactions). There are a couple of areas where you have to time your way past a couple of roving wolves (although actually they look like the pet pooch) but it really isn't very difficult. I'm not sure whether this is a criticism exactly but certainly it's important to realise it is a game of puzzles.

The puzzles take various forms. Eating food you might find is wise and obvious. Finding boots to stomp on the spiders seems less so. Sometimes there are objects in cupboards and consequently whenever you find such a container it's worth walking up to it and pressing the 'pick up' key. Sometimes energy may be restored, sometimes you may find a gun, you may even find the deeds to the castle, and getting out with them is the point of Part 1 of the game.

There's quite a lot going on in

FACTS BOX

Visually excellent. It's inventive and ambitious. Definitely designed for puzzlers rather than battlers though

★★★★★

NOSFERATU
Label: Piranha
Author: Design Design
Price: £9.95
Memory: 48K/128K
Joysticks: various
Reviewer: Graham Taylor

Part 1 – a few secret rooms and secret passages (here's a clue – where would you expect to find the entrance to a secret passage?) and objects with mysterious uses.

The game looks superb, particularly the detailed backgrounds which are more than just good to look at – they are actually atmospheric. Check out the rats scurrying around the cellar, look out too for the furniture stacked up ominously.

In Part 2 – you play three characters and your task is more complex. The village outside the castle is being turned into vampireville as Dracula turns more and more people into mindless blood-sucking zombies (just like members of fundamentalist religions really). You have to kill them with a stake through the heart and use Lucy as bait to lure Dracula into her room where, maybe, he can be killed.

Although the town is just as beautifully realised at the castle (the rooms interiors in particular) the townspeople are all constructed from the same two sprites (because of memory limitations apparently), one male and one female. It looks fairly bizarre and means you only know which one is you by actually seeing which character moves under your control. Another strange touch is that the female character totally lacks legs and moves around as though being wheeled around on rollers (an old programmers trick to avoid having to animate legs).

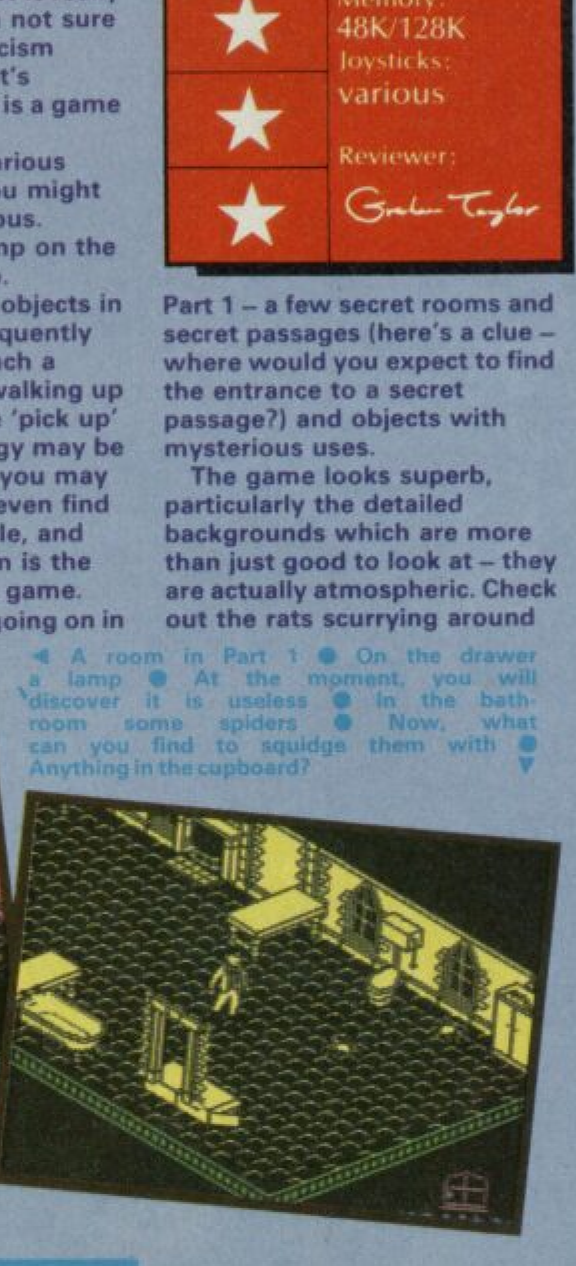
Getting the stakes is neat. First you find an axe, then you look for any wood that might be lying around – like a chair for example.

In Part 3, more of an endgame really, you must, having lured Dracula to Lucy's room, keep him there. This involves some tricky action with stakes, garlic and the rest. If he doesn't manage to get away before dawn you've done it, because, as we all know, at dawn vampires dissolve into special effects unless safely tucked up in their graves.

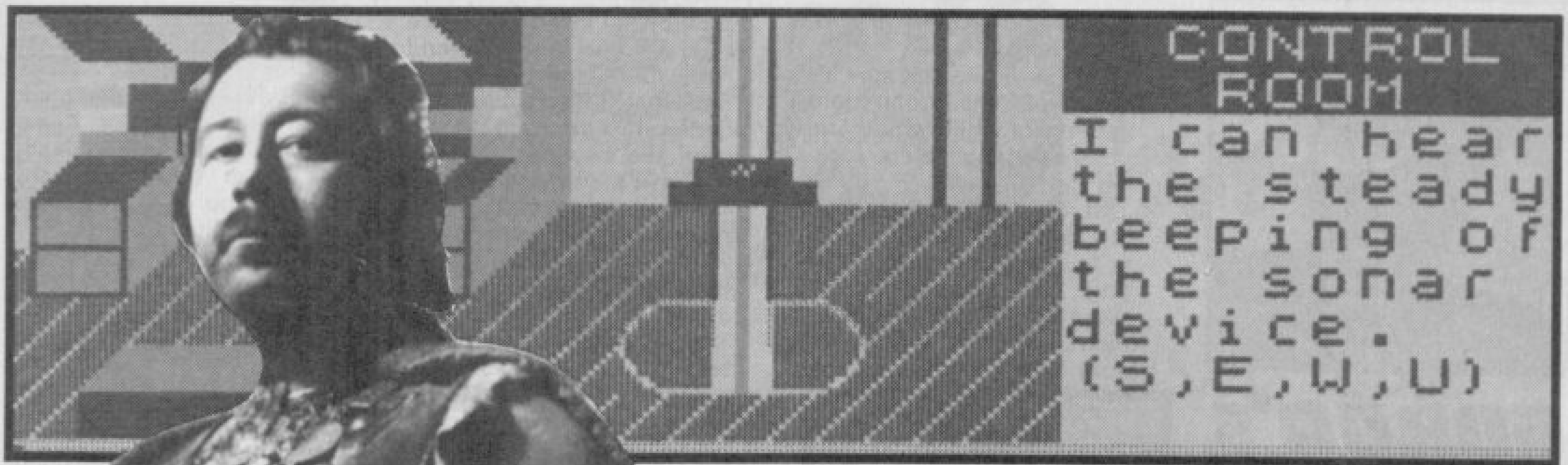
My doubts stem from the fact that despite being so strong visually it lacks 'action'. There are no occasions really when your joystick will even get warm. These doubts make Nosferatu a few points less than a Classic■

◄ A room in Part 1 ● On the drawer a lamp ● At the moment, you will discover it is useless ● In the bathroom some spiders ● Now, what can you find to squidge them with ● Anything in the cupboard? ▼






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Running an adventure helpline is a bit like sitting in the tap-room of some bizarre nineteenth century travellers' pub. Stay there long enough and you'll pick up snippets of information about hundreds of outlandish places and events. Sometimes you can rely on the gossip, sometimes you can't but you store it all away hoping it may come in useful for other travellers.

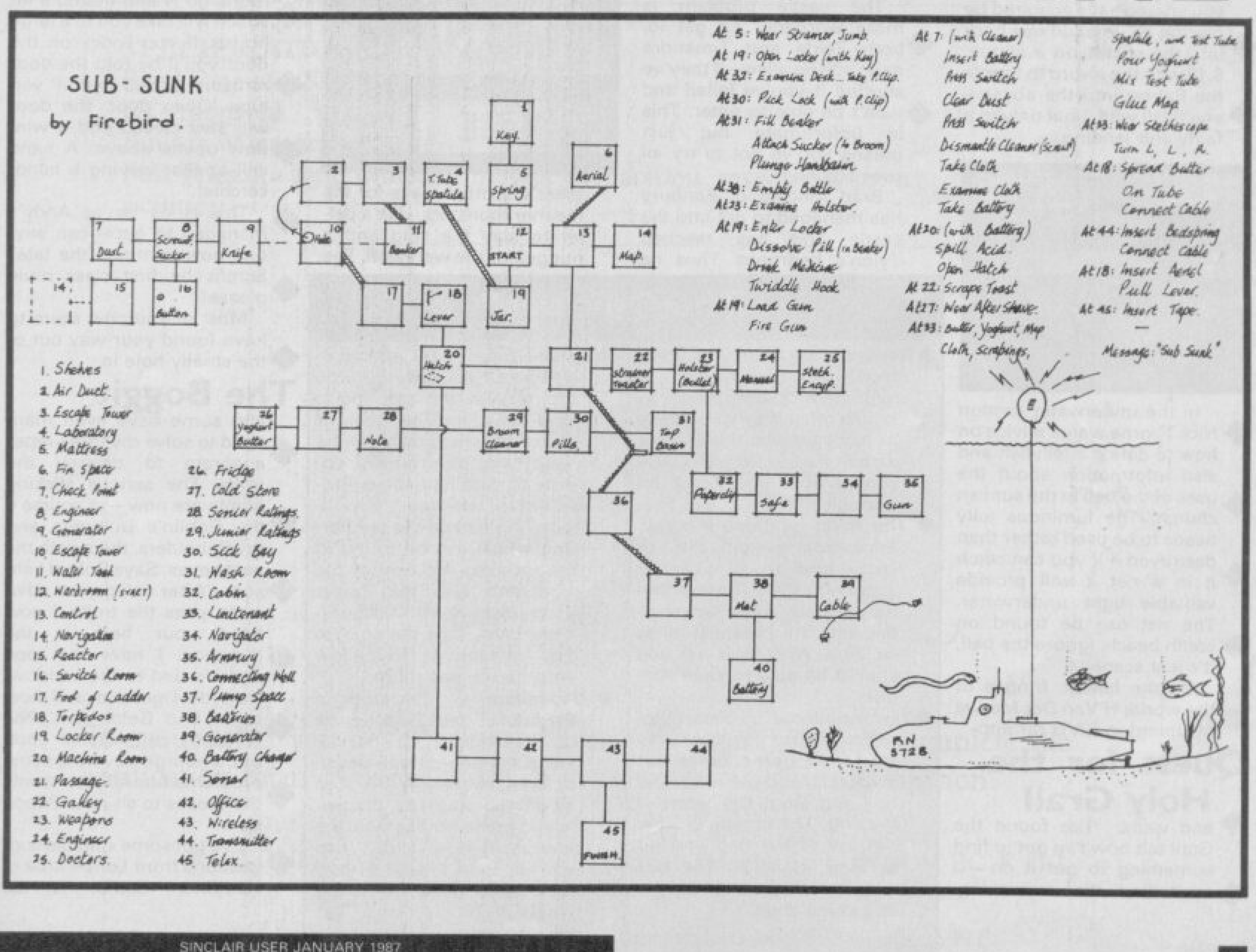
You end up with a map of a fantasy world that's always incomplete and usually resembles those medieval charts of faraway places which get rather vague in the middle – often decorated with pictures of men with heads in the centres of their body or statements like 'here be dragons'.

So now and again it's nice to get hold of a traveller who's taken great care to document his journeys fully. Sandy Duncan of Glasgow has sent in no less than eighteen full solutions and maps. Here's the first for the Firebird effort

Subsunk ,

a game that still troubles many of you. Anyway, let's hear it for Sandy, a true philanthropist – look it up,

GORDO's HELPLINE





GORDO'S HELPLINE

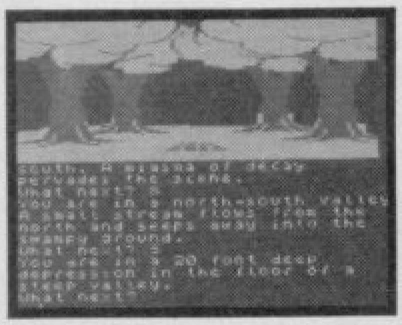
it's nothing to do with booze.

Now to business with a number of queries on

Adventure Quest,

now part of Level 9's **Jewels of Darkness** trilogy. Alex Jones of Coventry asks: "How do I get past the Balrog in this game? I suspect the phoenix may have something to do with it – but what?".

No, the phoenix has no direct role in this problem. Once you've stolen the sunstone from the altar you're inevitably going to encounter the vile Balrog on the Bridge of Stone. To defeat it you'll need a sword which you should have acquired by placing an emerald eye back into the socket on a statue. 9,18 with the sword to topple the Balrog into the abyss – you'll fall with it but only to a fairly soft landing.



In the underwater section Nick Thorne wants advice on how to defeat a jellyfish and also information about the uses of the bell in the sunken church. The luminous jelly needs to be used rather than destroyed – if you can catch it in a net it will provide valuable light underwater. The net can be found on south beach. Ignore the bell, it's just scenery.

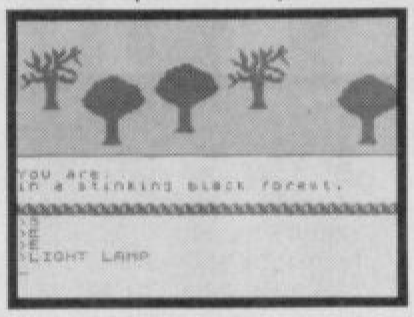
On the lunatic fringes of the world, H Van Der Merwe of Upington SA is far into

Quest for the Holy Grail

and wails: "I've found the Grail but now I've got to find something to put it on – I can't find the something. Eternal and knightly gratitude for help."

OK, Sir H, no sweat – try heading for the throne room in Camelot where you'll find the something you're looking for.

David Van Loon (really?) of Leeds has found his way to this room but asks: "The door here keeps closing – I've got a piece of wood but how do I use it to keep the door open?" Pretty much as



you would in real life, Dave. 4,22 will let you through. A crazed Van Loon continues: "I'm also working through

Kentilla.

How do I enter Tylon's castle and how do I get the Rattling Quarg across the river?"

The Quarg can save you from the deadly tentacles. Getting it over the water is straightforward enough provided you remembered to bring along the rope from the Cavezats' cavern. Just 19,6.

The castle problem is more worrying. To get in, both Zelda and Timandra must still be alive – if they've snuffed it you've failed and won't be able to enter. This is unfortunate but just means you've got to try all over again.

Brad Kincaid of Banbury has managed to get into the castle and has reached Tylon's bedroom. Thus he grumbles: "In Tylon's castle I've got the graphite and have found the transporter but what do you do in the bedroom? I can't get the key from the bedpost, if that's where it's supposed to be. My computer won't examine anything in the room. Also, what do I do with the crystal? Why does it glow and go dull?"

This is a bit puzzling, really. As far as I know, to get the key you must 1,20 – I'm not aware of any particular conditions that apply to this but, if anyone has an alternative, please let me know and I'll pass the information on.

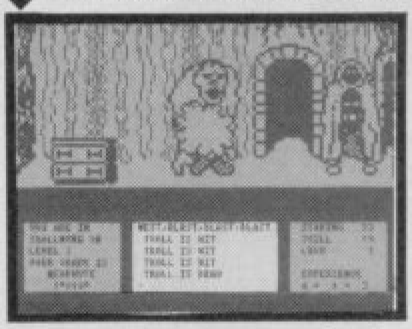
The crystal is used to overcome the troll, who loathes light. Whilst it's glowing you should put it 2,25,16.

Don't open this until you see the troll – the burst of light will turn the monster to stone. Don't expect this trick to work if you put the crystal in when it's dull.

Still having trouble with the monsters in

Heavy on the Magic?

Try these tips from Jon Olav Vik of Norway on how to keep them at bay: "All the creatures can be blasted but

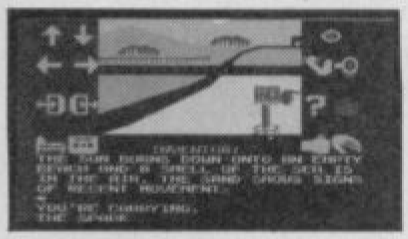


there are other ways for the meaner monsters. Use a pellet to slay the slug and a nugget for the werewolf. The medusa will be petrified by her own reflection in the mirror and the cyclops fears the slat. As usual garlic will deal with a vampire. Apex? Blast away – he'll die finally if you're lucky but why should you want to kill him at all?" Quite.

Andy Bowden of Taunton has been sampling

Zzzz,

Mastertronic's latest adventure, and suggests for starters: "Go to the beach and dig in the sand with the spade. Lift and get the bucket you find there, then dig again – the sandman will appear but hides again. Head W and push the bike, return to the beach and head E to the snow palace where you should ring the bell. The sandman will now open the



hatch. Give the bike to him and go E to the fridge. There's some cheese in it. If you close the fridge door a chest will appear. Untie the tie and open the chest – there's an unloaded water pistol inside.

"Return to the beach once more, go N and thumb a lift which will take you to a large house. If you knock on the door you'll be told the door remains closed but if you type 'Open door' the door will stay closed and a window opens above. A hand will appear waving a handkerchief."

This is as far as Andy's managed to get – can anyone now continue the tale? Scrolls by first class mule please!

Most of you now seem to have found your way out of the smelly hole in

The Boggit

and some have even managed to solve my three-letter anagram to destroy the trolls. The serious sticking points are now – of course – the Goblin's Dungeon and the Beholders, them with the nasty eyes. Says Robert Lenson: "After using your advice to pass the trolls, I now need your help in the dungeon. I have the rope and it's tied to the window. How do I get out and how can I find Goldbum?" Phil O'Malley and Allistair Scott of Edinburgh have the same problems but Allistair wants the means to slay the Beholders.

I've got some suitable suggestions from Lorien Kibe of Haughton, Staffs: "In the

The Quickies

- **Never Ending Story:** Greg McDougall, Birmingham, is infuriated and about to switch off in disgust because he can't get past the spider's web in Part 2. No problem – simply 30,7 and head on through.
- **The Hulk:** Dave Mansell, Edgbaston, would like to know how to survive the ants and asks if Antman can be rescued. Sure he can – the ants are potential allies so 29,8. With their aid you should be able to save Antman.
- **Terrormolinos:** Stuart Stoneham, East Preston, has tried a thousand times but always fails to get out of the bull-ring. Go to the centre of the ring, 32 and red 24. Now run out of the ring and go S, S, E, N, N, E. The bull should end up as hamburger in a china shop.
- **Spellbound:** G Catterall of Newport is making little progress in the gas room. He's consulted the Book of Shadows which tells him he needs two very smelly objects to cast Fumaticus Protectium – where are the objects? He'll need the red herring which can be found in the room to the right of the start and also the Power Pong plant from the basement level. Cast the spell in the basement to allow entry to the gas room.
- **Microman:** "I'm stuck in the house" says D McKenzie of Stapleford, "I can't develop the photograph despite trying every way." First of all get the blue, red, magenta and green bottles from the low shelf. Now 1,10. When you've done this 31,11 and 1,10 again. This will allow you to 33,28.



GORDO'S HELPLINE

dungeon throw the rope until it catches against the window, then pull it. Once out take the rope – to guard against being chucked in again, 'cos you probably will be. Now go SW and get the egg. This is essential for a first class ride on the giant eagle. Now NE, SE, E, SE, E. Here you should find the ridge. To reach Goldbum travel N, SE, S from this spot.

"If you want to get rid of the eyes on the forest road, the best thing is to smoke a cigarette.

"All right, now I need to know where the pepper is to get through the morna Gate in

'Bored'?"

Fair enough – on Featherwop. When you leave the inn at Whee go N and then E a few times to the southern edge of the Tall Mountain. N and Up to reach the summit. Look around and examine carefully.

Now, on with the scuba gear and down to

Seabase Delta

where Darren Emery, M Jones of Bristol and Paul from Hoyland shriek, "What do I do on the blessed train and what use is the stupid travel permit?"

Simon Ruda of Edgware delivers the goods but has questions of his own. First you must 15,21 to activate the car system and then 12,3. Once inside you must wear the seat belt – the vehicle won't move otherwise – and 23,17 to get it under way.

Simon can't switch the conveyor belt on – this can be done with the fork in your possession. Just 14,26. Both Simon and Steven Robinson (thanks for the solutions to **Mafia Contract** and **Espionage Island**) are trying to make pancakes without much luck. The answers come from Karl Miles of Castletown in his full solution. First get your egg from the sleepy hen by entering 13,27 at the cage – naturally you'll need the gum. Now all you need is the bowl and some flour and milk.

Further along, Martin Williams of 127 Broadway, Eccleston, St Helens, asks how to open the huge metal sliding doors and keep them open. Once in the room with the microphone, 23,5 go S and then enter the doors.

INFORMATION EXCHANGE

- Atlantis Software are big adventure producers. If you write to them for help or to order games, note that they've now moved to 28, Station Road, London SE25 5AG.
- Phil Symonds of 29, Goliath Close, Roundshaw, Wallington, Surrey SM6 9HN is willing to correspond and help with a number of games new and old. Drop him a line with an sae if you need help or would like a full list of his solutions.
- Geoff Marshall, 17 Balbeggie Terrace, Dundee, Scotland sent me a list of about 120 (count them!) adventures he's finished and willing to help with – practically every game of note is included. He'll answer questions at the rate of 2p per question plus an sae. Try him out if you're interested.
- If you know how to get the wax statue in **Return to Ithaca** let Sandra Sharkey know at 78 Merton Road, Highfield Wigan. In return she can help with games like **Valkyrie 17, Ground Zero, Bored,** Level Niner's and Artics.

See you next moon.

GORDO GREAT BELLY

Greatbelly Clue Matrix Thingy

1: EXAMINE 2: INTO 3: CAR 4: WEDGE 5: CASSETTE
6: ROPE 7: WEB 8: ANTS 9: SMITE/ATTACK 10: TRAY
11: BOTTLES 12: GO 13 BLOW 14: SHORT 15: PULL
16: SACK 17: CARD 18: BRIDGE 19: THROW
20: BEDPOST 21: LEVER 22: DOOR 23: INSERT
24: HANKY 25: THE 26: SWITCH 27: BUBBLE 28: PAPER
29: GET 30: CUT 31: EMPTY 32: WAVE 33: DEVELOP

SINCLAIR user COMPETITION

MURDER AT CRL



The Competition

A murder has been committed. On the right we present a series of facts about the possible candidates for the guilty party. Using logic, elimination and guesswork you have to pick out, from the information given just who the culprit is.

Fill in the coupon below and send it off pronto to Dead Body Compo, Sinclair User, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU

The guilty party is.......................................

....

Name:.......................................

Address ....

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....

Picture this: Assembled in the drawing room a mixed collection of the rich and famous. And a murder has been committed. A murder which simply oozes with clues but has left the determined but stupid local constabulary baffled. Somewhere amongst the assembled crew is the guilty party, about to get off scot free when. . . you walk into the spotlight.

You have been able to piece together the clues, your mixture of painstaking investigation, almost telepathic reading of people's inner characters and rigorous deductive logic has enabled you to discover the murderers' true identity. You walk into the spotlight, there is a hush. . .

Sounds fun? This month SU can make it all come true. Because this month we proudly present the SU Whodunnit Competition.

First prize a Murder Weekend, where you get to solve a murder by questioning suspects, looking for clues, listening to evidence etc etc. The Murder Weekends are brilliantly devised like an Agatha Christie novel made real. You'll never forget it.

The reason for all this murder and mahem is the imminent arrival of Murder off Miami, a computer game version of a solve-it-yourself crime book originally devised by Dennis Wheatly.

The game is being created by Fergus McNeil so should be very bizarre indeed. And twenty runners up will also win copies of the game

The puzzle

My first is in stab and also in slash

My second is in bomb but never in blast

My third is in axe and not in knife

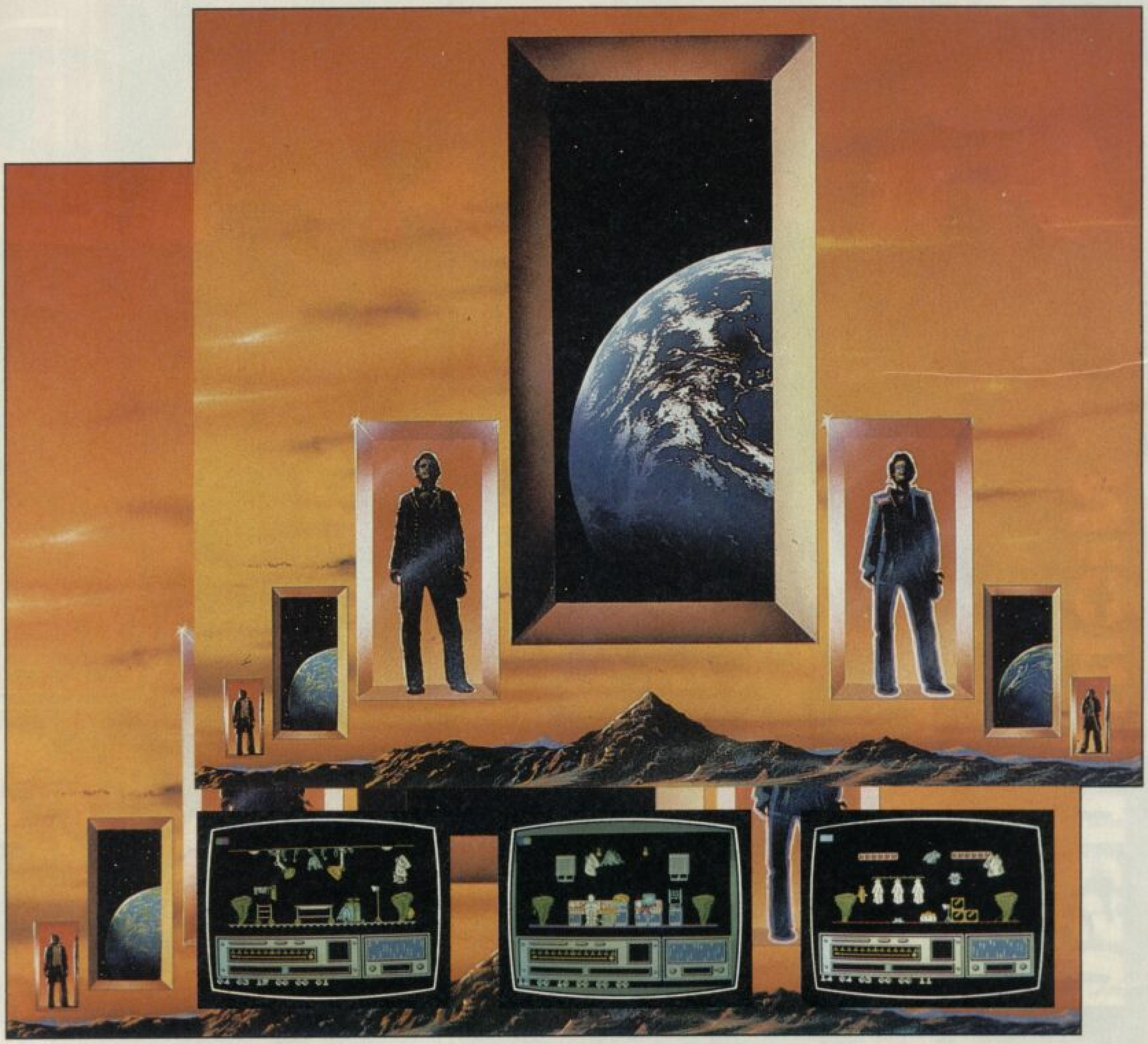
My fourth is in murder but not in death

My fifth is in heat but not in assault

My last is in crimes and also in savage

Potential Murderers

1) Adrian
2) Soames
3) Sooty
4) Sophie
5) Stanislavsky



Two worlds – the mirror image of each other, touch in space through a Time-Warp.

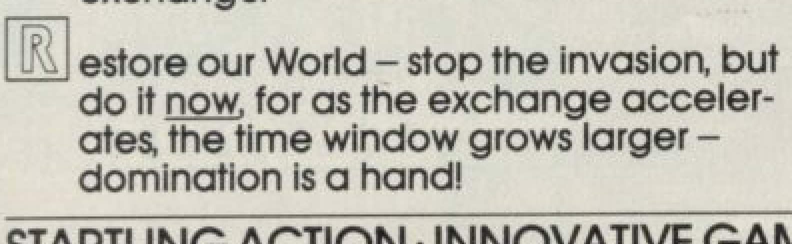
One is positive, good, familiar – our World; the other is negative, evil yet unnervingly familiar.

Their interface – a time window through which objects and beings can pass; contact has resulted in the beginning of exchange.

Restore our World – stop the invasion, but do it <u>now</u>, for as the exchange accelerates, the time window grows larger – domination is a hand!

DOUBLE
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TAKE

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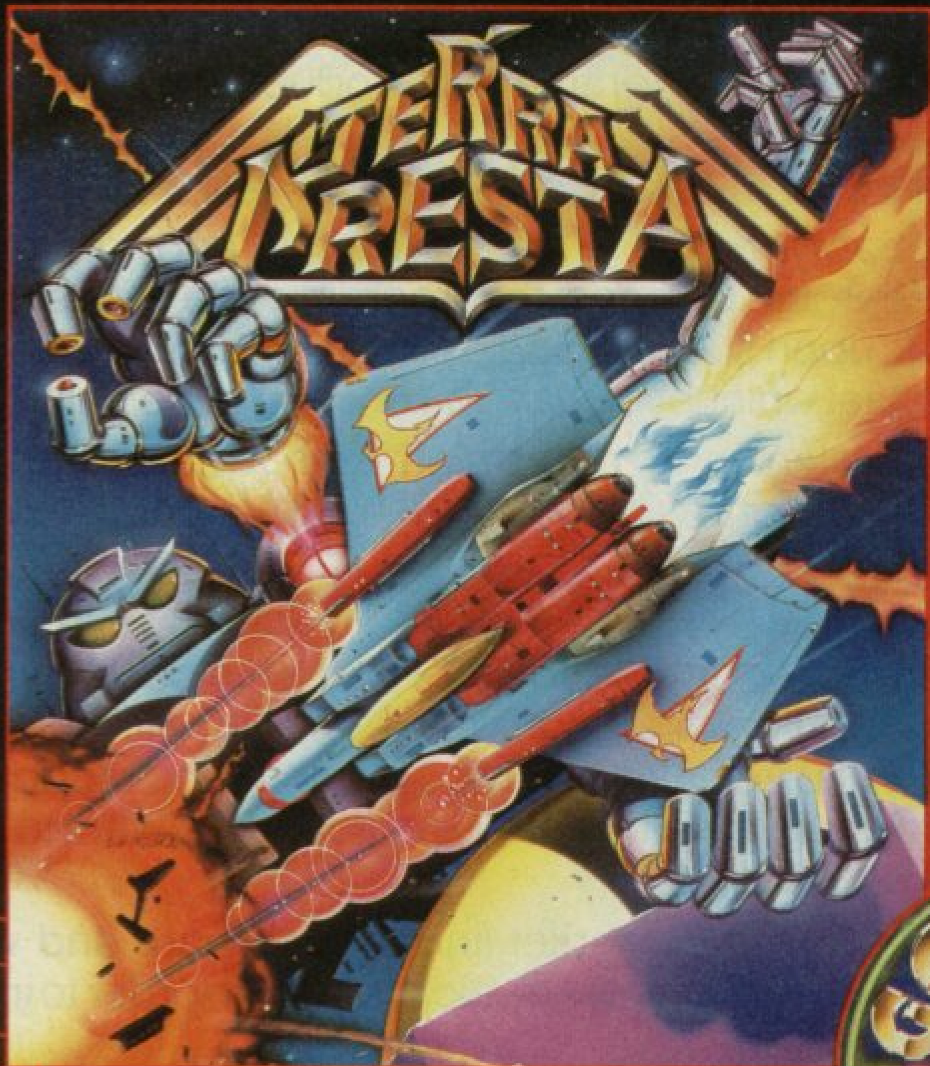
ocean

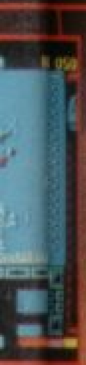
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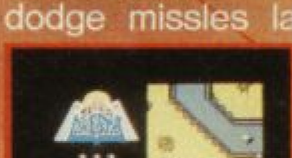




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PAWN

The **Pawn**, it cannot have escaped your attention, has had some pretty good reviews. Actually on every one of its editions from the QL original, through the Amiga and Atari ST to the Commodore 64 it's had the sort of reactions that caused the prefix mega to be invented.

What is it? Well it's a graphics adventure except that on the Spectrum 128K it doesn't have any graphics.

This is a shame because the graphics on ST were staggering, even the graphics on the C64 were good. Blame the fact that the 128 doesn't have a disc.

What are you left with when you take away the graphics from **The Pawn?** Probably the only adventure to seriously compete with the best Infocom offerings in terms of sentence analysis (all that 'put the small frog in my pocket under the tree trunk then insert the gold key, open the box and keep all except the cuddly toy' stuff) and, let us not forget, wit. That's all.

You see there are serious adventures and there are funny adventures.

Serious adventures seriously depict serious battles between good and evil and have characters, places and objects with names that are either a) stolen from very bad fantasy novels or b) apparently based on names of kitchen cleaning materials.

Funny adventures, with the exception of most (but not all) of Fergus McNeil's stuff aren't funny. Funny adventures that aren't funny are even worse than serious adventures.

The Pawn, however, is serious and funny at the same time. That is, it maintains a constant balance between being an adventure that you can play as a serious challenge and also being an adventure that is aware of the pitfalls and cliches and avoids and/or twists them.

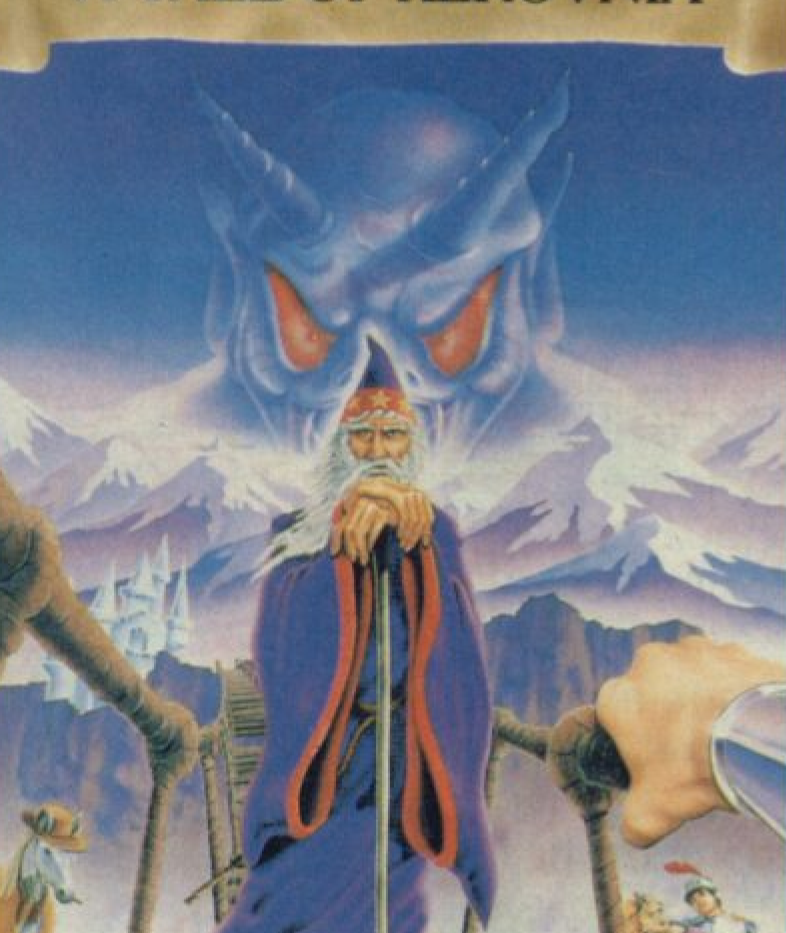
Take Princesses for example. Princess are for rescuing (being poor weak women and all that, facing fates worse than death). There is a Princess in **The Pawn** but . . . well . . . she's a bit of a pain actually.

The plot. Well there isn't actually a plot – there's more of an overall concept. Kerovnia (as names for mystic lands go this is not too bad since it merely sounds like some Slavic state currently under Soviet control) is politically wobbly and King Erik looks to be on the way out (who can respect a king called Erik) partly because of his having made the Roobikyoub dwarfs persona non gratis.

The dwarfs are notoriously unsound but brew excellent whisky and. . .well. . .I think you get the idea. You arrive in time to steer events a number of different ways, it's just that some actions will result in your death.

The Pawn, is obviously considerably more sophisticated than the usual *Go North, Eat Frog* stuff. I remember Anita Sinclair (Magnetic Scroll's quazi-femme fatale) demonstrating the various ways of refering to different keys that could be either in her pocket or a tree trunk. Her enthusiasm was not so much contageous as exhausting. What it all means and why it matters is simply that you can come that little bit closer with **The Pawn** to actually typing normal English sentences. You are also less likely to get idiotic responses to perfectly reasonably (if incorrect) instructions.

SINCLAIR USER CLASSIC



There are a lot of ways of playing **The Pawn.** It is possible to wander around quite a wide area not having solved much but just enjoying the text comments and ludicrous set pieces. Try having a sensible conversation with the guru to kick off with. It can get pretty unsettling. You could go straight for the serious problem solving, or you could just opt for some of the offers you get to take on minor quests from assorted dubious characters you meet on your travels. Some of these quests sound simple (delivering the odd sealed letter), although usually there is a problem that means it isn't as simple as it seems.

What else? **The Pawn** has an in-built clue system where, by entering codes from the back of the manual, you can get hints on particular problems.

It's very expensive but worth it. And it is also one of the very few programs which will *only* work on the 128K machine, so its a nice treat if you've just invested in a 128K+2■

FACTS BOX

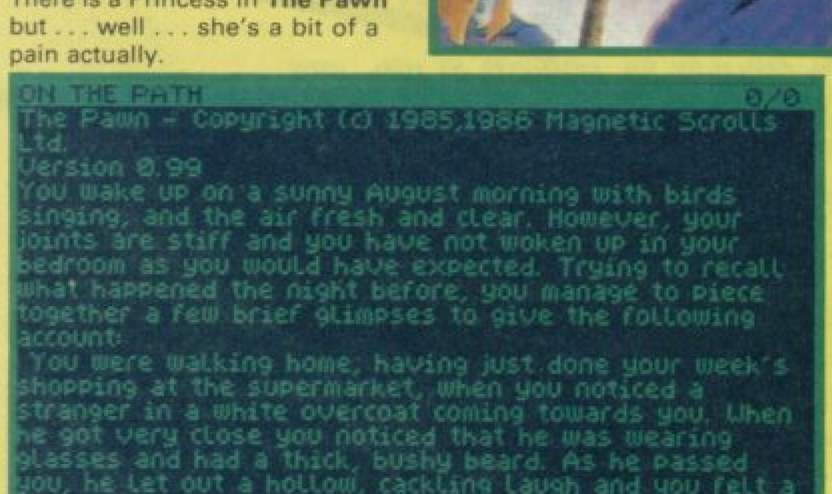
An essential purchase for anyone into adventures who has just upgraded to a 128 – it doesn't run on a 48K

THE PAWN
Label: Rainbird
Author: Magnetic Scrolls
Price: £14.95
Memory: 128K

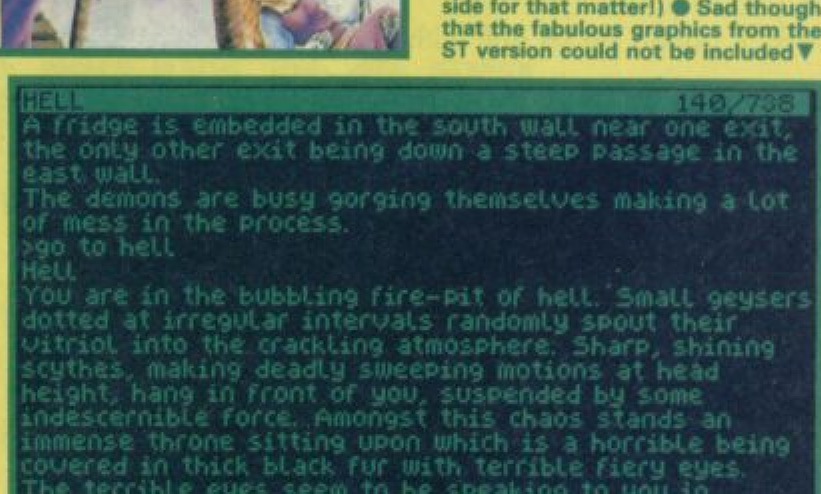
Reviewer: Graham Taylor

★★★★★

Long atmospheric location descriptions are a key feature of the Pawn ● That and what is probably the most sophisticated text parser this side of Infocom (or even the other side for that matter!) ● Sad though that the fabulous graphics from the ST version could not be included▼



```
ON THE PATH                                    0/0
The Pawn - Copyright (c) 1985,1986 Magnetic Scrolls
Ltd.
Version 0.99
You wake up on a sunny August morning with birds
singing, and the air fresh and clear. However, your
joints are stiff and you have not woken up in your
bedroom as you would have expected. Trying to recall
what happened the night before, you manage to piece
together a few brief glimpses to give the following
account:
 You were walking home, having just done your week's
shopping at the supermarket, when you noticed a
stranger in a white overcoat coming towards you. When
he got very close you noticed that he was wearing
glasses and had a thick, bushy beard. As he passed
you, he let out a hollow, cackling laugh and you felt a
sharp blow on the back of your head. Then you woke up.
 You now notice that you are wearing a silver
wristband which covers your forearm.
On The Path
<MORE>
```



```
HELL                                       140/738
A fridge is embedded in the south wall near one exit,
the only other exit being down a steep passage in the
east wall.
The demons are busy gorging themselves making a lot
of mess in the process.
>go to hell
Hell
You are in the bubbling fire-pit of hell. Small geysers
dotted at irregular intervals randomly spout their
vitriol into the crackling atmosphere. Sharp, shining
scythes, making deadly sweeping motions at head
height, hang in front of you, suspended by some
indescernible force. Amongst this chaos stands an
immense throne sitting upon which is a horrible being
covered in thick black fur with terrible fiery eyes.
The terrible eyes seem to be speaking to you in
some sort of empathic transmission. It takes you a
while to figure out what they are trying to say but
eventually you get the message - they are saying
"Hello".
>ask devil about life, the universe and everything
```

These days everyone seems to be writing their own adventure. And, some of these 'indi' home-made efforts – often available only by mail-order – turn out to be well-impressive, too.

In any adventure it's the plot that either makes or breaks it – and the big firms certainly don't have a monopoly on ideas.

Using an adventure writing system – as most of these 'indi' efforts do (either **The Quill** or **GAC**) – anyone can compete and follow in the footsteps of famous authors like Fergus McNeil or the St Brides team■

ADVENTURE REVIEW

DOME TROOPER

Dome Trooper is excellent. It's **Quilled**, like so many independent adventures, but it has a highly original plot which is both well thought out and executed.

The Illustrator has been used to provide graphics that complement the adventure, and the author has made clever use of the special features such as the *Flash* command – at one point, a huge CocaCola sign flashed on and off above a futuristic equivalent of Piccadilly Circus.

It is the far future: humanity seems to have become divided into two factions, the people who live in the domed cities and the evil barbaric hordes who infest the desert outside.

You know enemy agents within your beloved city have been told to poison the city's air and water supplies with a terrible drug that will kill everybody within days.

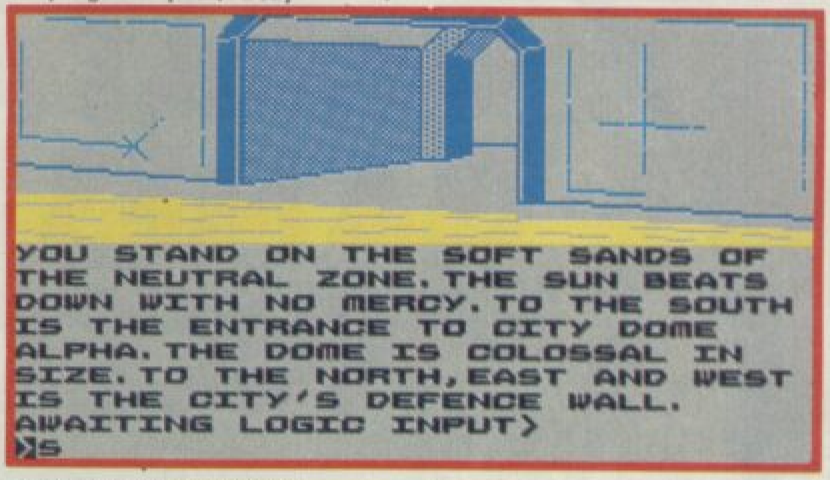
So here you are, armed with your trusty blaster, standing on the edge of the desert outside City Dome Alpha. What now? Well, you could bodly stride into the desert and take on the enemy on their home ground. . . or do what I did, which is turn tail and zip back into the safety of the city. Anyway, there's enough exploring to do inside the city walls to keep any adventurer happy for ages!

Inside the city you find just about what you'd expect – people and buildings. You can zip about by using the transporter system, which acts like a lift and takes you to different levels of the city.

On the top floor there's the hydroponic gardens where the city's food supplies are grown, tended by robots. Then there's the main living areas, filled with bars and low dives and gun shops and restaurants. . . The people you meet seem to be scared of you. Either that, or they want to shoot you.

Dome Trooper proves that, with help from **The Quill** and **The Illustrator** and with a generous helping of imagination and hard work, it *is* possible to put out good adventures for a reasonable price without plagiarising other people's ideas■

Quilled and independent, fast and slick ● Outside the dome ● Dare you venture inside? ● It's the only way to go and quick, I'd say ▼



FACTS BOX

Nice one. Lots of invention, neat puzzles of about the right level of difficulty. And it's really cheap

DOME TROOPER
Label: Matand
29 Moorland Road, Michelover, Derby
Author: M. Holmes
Price: £2.95
Memory: 48K/128K

Reviewer: Gary Rook

★★★★☆

PREHISTORIC ADVENTURE

Crusader Computing's **Prehistoric Adventure** is a well crafted adventure that includes an element of – horrors – education!! You get to learn about dinosaurs while solving the problems. They're big.

Actually, even armed with the clue sheet all I've seen so far is a dinosaur bone, but I'm sure I'll come across them soon.

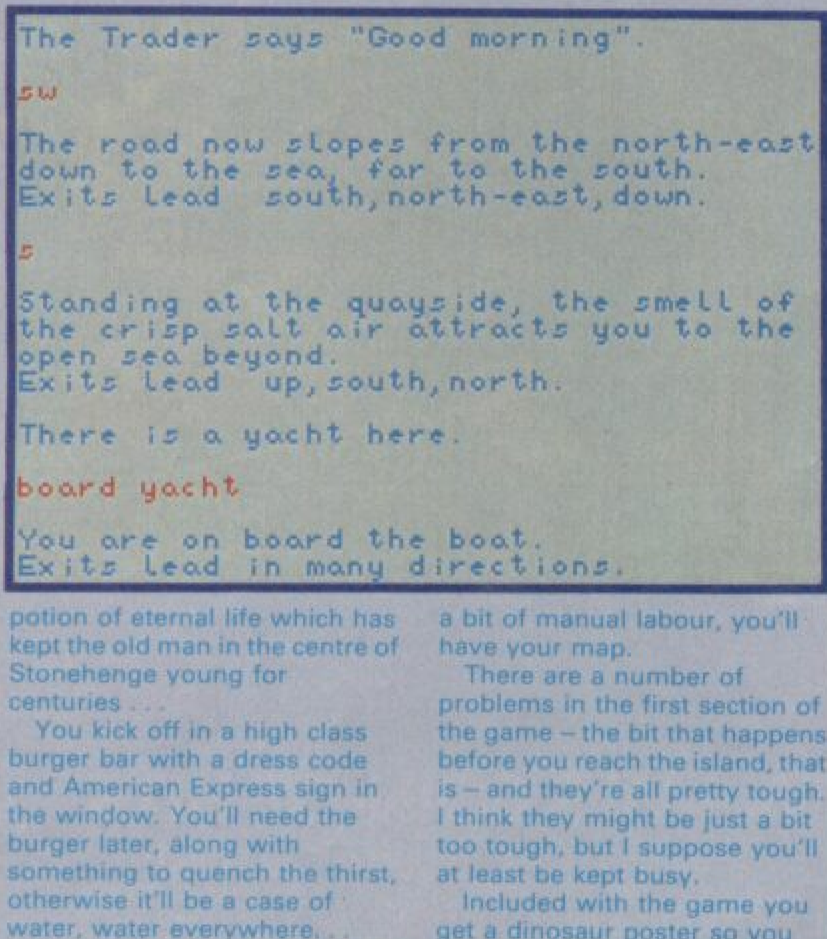
Basically, you have to get to the island of dinosaurs to find the main ingredient for the potion of eternal life which has kept the old man in the centre of Stonehenge young for centuries . . .

You kick off in a high class burger bar with a dress code and American Express sign in the window. You'll need the burger later, along with something to quench the thirst, otherwise it'll be a case of water, water everywhere. . .

Finding the map is a bit of a pain. First map the endless plains, then find the coppice. Use the rod to find the underground stream. And with a bit of manual labour, you'll have your map.

There are a number of problems in the first section of the game – the bit that happens before you reach the island, that is – and they're all pretty tough. I think they might be just a bit too tough, but I suppose you'll at least be kept busy.

Included with the game you get a dinosaur poster so you can spot who's who when you finally get to the lost world. Even so, I can't help feeling that £9.95 is a bit steep for a text-only adventure.



FACTS BOX

Very professionally presented effort. It's a toughy though and, despite the full-colour poster, it's quite pricey

PREHISTORIC ADVENTURE
Label: Crusader
18 Henley Wood Road, Earley, Reading, Berks
Price: £9.95
Memory: 48K/128K

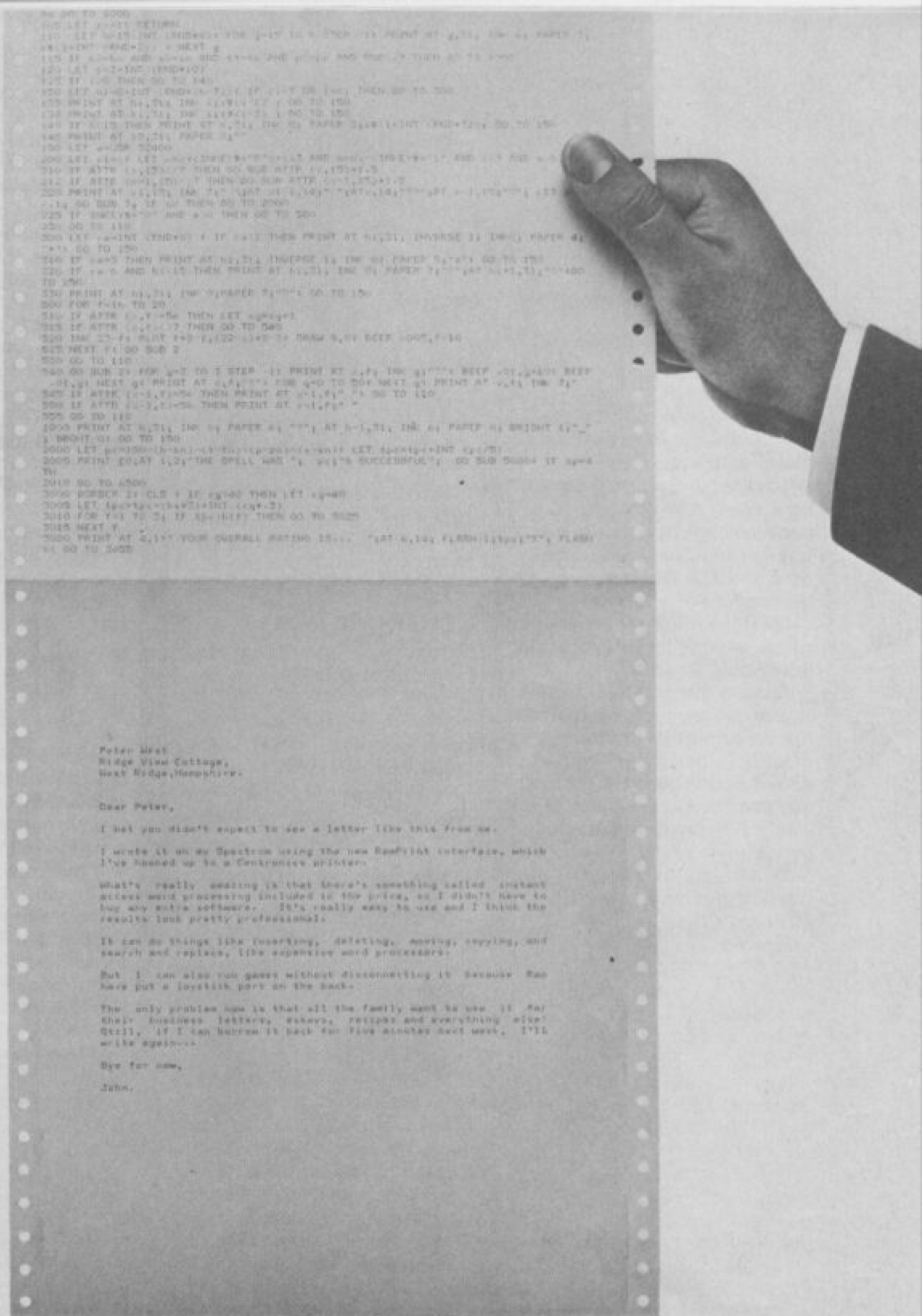
Reviewer: Gary Rook

★★★☆☆



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...the name of the game
Imagine Software (1984) Limited, 6 Central Street, Manchester M2 5NS. Telephone: 061-834 3939 Telex: 669977.
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DEMON FROM THE DARKSIDE

Don't be put off by the cassette insert artwork, which is pretty grisly to say the least. **Demon from the Darkside** is a snappy, no nonsense little adventure which was put together using **The Quill** and **The Illustrator,** and a fair amount of attention to detail if the information you get when you call up the vocab list is anything to go by.

You are the good wizard's apprentice, trying to hold off the demon armies of the bad wizard. To delay the shadow demons controlled by the bad guy you have to enter his (ie the villain's) hidey-hole and slay him. Simple really – you only have an army of demons to worry about, plus assorted standard adventure game problems.

One thing which irked me somewhat was the spelling – reminiscent of some of Level 9's early stuff. I mean, using advise instead of advice, and spelling things ence instead of ance... However, such things should not be allowed to detract from the actual game.

The graphics are decent enough, and you have the option of turning them off if you like. I especially liked the way objects also had accompanying graphics, so when you call for an inventory you get pictures of what you've got as well as the list in words.

FACTS BOX

Quite an easy adventure but still good fun. Some of the spelling is a bit dodgy though

DEMON FROM THE DARKSIDE
Label: Compass
36 Globe Place, Norwich, Norfolk
Author: J. Lemon
Price: £2.50
Memory: 48K/128K

Reviewer: Gary Rook

★★★★☆

I haven't got very far yet – the perennial cry of the adventure reviewer not provided with a solution – but I have been able to pat myself on the back a couple of times for solving some of the problems which are quite tricky.

The Sid mentioned on the vocab list, by the way, isn't the mysterious Sid of the British Gas shares advert (unfortunately – I would have loved to have strangled him, I'm so sick of hearing his name), but a white rat who might help you once given the gift of new life.

One very useful feature of the game is a *Ramsave* option, which allows you to dump your present location to memory without having to bother fiddling about with tape recorders. Of course, if you want to turn your Spectrum off but *Save* the game, you'll need to fall back on the old fashioned cassette again.

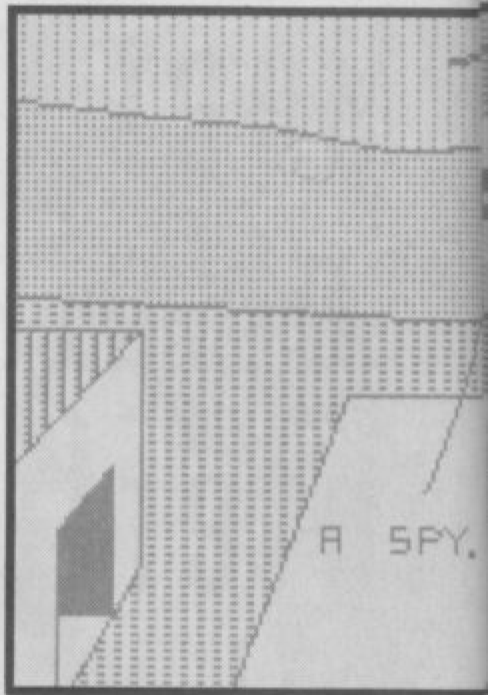
Demon is good, though perhaps a little simple. After all, I was surprised to get as far as I have so quickly...■

PARADISE

It must be my lucky day – another independent adventure which displays a heap of wit and intelligence! And great graphics, too...

Paradise Connection is another **Quilled** and **Illustrated** adventure, this time from a company called Birdseed Software.

The plot is original and highly amusing: America faces a financial crisis so bad even the President has had to try to think about it. The FBI and the CIA, even with massive amounts spent on market research, the cassette label informs you, have failed to find out where all the dollars are disappearing to. Anyway, to cut a long introduction short, you, Kid Capello, the FBI's worst agent (a sort of Washington version of Inspector Clouseau, no doubt) have been sent to the little town of Brandis Reef, somewhere in Latin America, to find out who's nicking the President's dollars and just how they're doing it.



The graphics are excellent – cartoon-like drawings of people, you in a trench coat and trilby hat looking like something out of an old 'B' movie. So far, I've been to about 20 locations, but I haven't found much to do yet. I suspect I should be talking to all the people I meet, but right at the moment I'm more interested in sight-seeing.

I've avoided getting killed in quicksand by the simple expedient of taking notice of the warning sign, I've been swept off to a desert island by a freak wave, and I've been humiliated after trying to kill an arab who seems to spend his time dancing on the table-top in his

ORAN

Dual Dimension Software's **Quest for the Golden Orange Peel** is another of those adventures where you have to find the magical mystical item – orange peel, ring, C5 etc – and bring it back.

ADVENTURE

This program left me in something of a quandry, because **Adventure** is, unashamedly, a copy of the first ever adventure game.

FACTS BOX

Affectionate homage to Advent, the first ever adventure game. If you know the plot it's not for you

ADVENTURE
Label: Adventure Software
(soon to be released on the Players label)
Price: £1.99
Memory: 48K/128K

Reviewer: Gary Rook

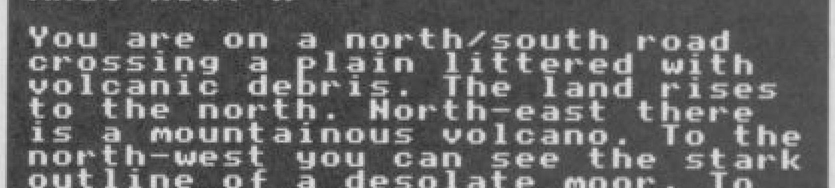
★★★★☆

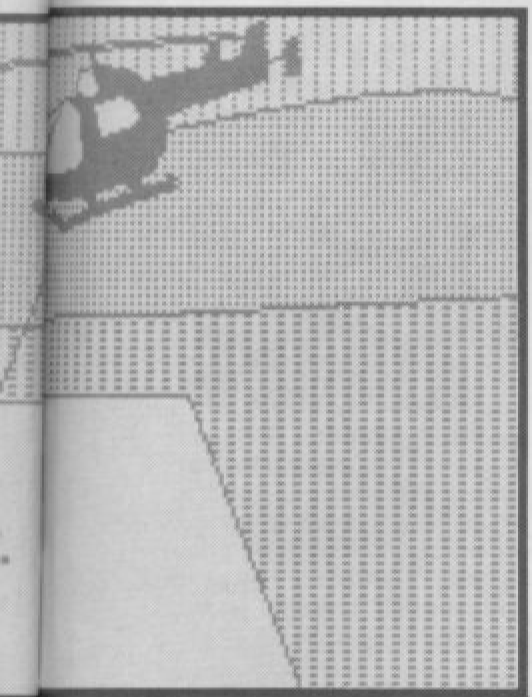
For those of you who may not know your computer game history, back in the mists of time (the early 1970s) two computer geniusses called Don Woods and Willy Crowther – Americans both – wrote a game called **ADVENT**. They called it that because at the time, computer files could only have names of up to six letters, and they had to be in caps. **ADVENT,** believe it or not, is short for adventure.

Since then, numerous people have written their own version of the game, some of them commercial products. This is possible because the program was public domain – ie nobody claimed copyright on it **Adventure** is yet another version.

That means that, to the seasoned adventure, the plot is as familiar as the Lord's Prayer to a born again Christian. You have to collect the treasures, take them back to the hut where you start. The objective is to collect all the treasures there are in the game and so score maximum points.

I'm assuming that, since this is a copy of **ADVENT,** the plot continues to be basically the same – I haven't had the time to





CONNECTION

FACTS BOX

Highly imaginative plot. It's the political conspiracy CIA/FBE involved in Latin American scenario. Entertaining too

PARADISE CONNECTION
Label: Birdseed
Springfield, 180A Purlpit, Atworth, Melksham, Wilts
Price: £3.99
Memory: 48K⅓128K

Reviewer: Gary Rook

★★★★☆

seedy night club. 'What a plonker – I'm no Rambo' sneered the screen before telling me that I'd been killed by said Arab.

My only objection to the program is that it's possible to see it as just the teeniest bit racist. Personally, I think that's rather objectionable – but it doesn't detract too much from the rest of the game.

So long as you don't mind the rather cardboard stereotype funny foreigners, a good game that should offer quite a few decent puzzles.

It's certainly good to see someone trying to create an original plot, rather than copying everyone else.

It just proves that, with tools like the Quill, it's the ideas that are important – and anybody can have good ideas, regardless of programming skill■

GE PEEL

Why, you're never told, and in this case you are unlikely to care very much after a few moves either.

You begin the game outside a mysterious grey temple that looks from the rather crude illustration like it was designed by the man who thought of lego, only he'd only invented one type of brick and they were all grey. Go North and you're stuck in the temple and, as you need some items from outside I'd go South if I were you.

South you find an uninteresting town where everybody sunbathes all day (don't blame me, that's what it says on the screen) and a very yellow desert. I mean yellow – like so bright it hurts the eyes.

Pick up the objects you find on the way and then get back to the temple. Inside you'll find that the place seems to be scattered with pornography, including 'tapestries' and copies of *Playboy*. Don't bother with the snakes – they kill you (mainly with more bad spelling: one of them gives you a head butt. Try peeling the padding off the cell and crawling through the hole you'll find.

Personally, I'd prefer less of the smutty innuendos and bad in-jokes (so bad they're actually out-jokes) about adventures and computer personalities, and definitely less of the pictures – like none at all. They don't add anything really just a waste of money.

What I would have liked more of? Well, how about more use of the dictionary for a start – and not the dictionary of gibberish you find in the game either. And how about a bit more imagination as well. **Orange Peel** is really little more than a tired old plot barely tacked together with some tired old sudden-death situations■

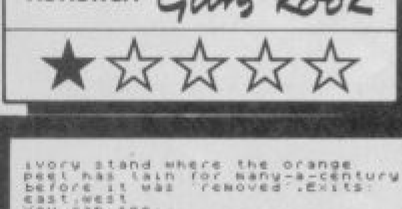
FACTS BOX

A miss. Tired plot, unimaginative writing and poor vocabulary. Nice title, shame about the game

QUEST FOR THE GOLDEN ORANGE PEEL
Label: Dual Dimension
Cedarwood, Darkes Lane, Potters Bar, Herts
Price: £3.99
Memory: 48K/128K

Reviewer: Gary Rook

★☆☆☆☆



play through the entire game, nor have I seen a solution. Indeed, there would be nothing wrong with that if it were the same game – it's very challenging, and everybody who claims to be an adventurer should have had a go at it at least once in their lives. But it has also been done so many times: I really don't know if we need another version of it.

Having said that, Adventure Software's version is very attractive the screens are well laid out, the choice of colours is good and makes the text easy to read, and everything seems to be programmed correctly.

Which means that if you haven't got a copy of **ADVENT,** then I would recommend this one for you – it's as good as any other.

If you have already got a copy, or played it on a mainframe, then I wouldn't bother■

DON'T PANIC PANIC NOW



FACTS BOX

Huge spoof – three full Loads – based loosely on the Hitch-Hiker's Guide. The snag is it's not all that funny

DON'T PANIC PANIC NOW
Label: Dented Designs
Memory: 48K/128K

Reviewer: Gary Rook

★★☆☆☆

Don't Panic – Panic Now! (which from now on I'm going to call **DPPN**) is an example of a genre of adventure game made famous by the sainted Fergus McNeil of Delta 4: that of the spoof or parody.

Indeed, one Fungus MacNaill makes an appearance in **DPPN**, rabbitting on about Delta 4.

Unfortunately, Dented Designs aren't half as good at it as Delta 4. In **DPPN**, as any fan of the four books in the *Hitch-Hiker* trilogy may have guessed by now, the words being parodied are those of Douglas Adams (and presumably the Infocom adventure game based on the books as well).

The whole thing has been put together with **The Quill** and **Illustrator,** and the graphics are typically angular, although pretty good nonetheless. The game is divided into three parts, and you have to solve each preceding part to get into the next one. Why designers think this is a good idea I don't know – I think it's far more likely to put people off buying the games. Why shouldn't you solve Part 2 before Part 1 anyway?

You are Arfur Bent, your house is about to be demolished by the big yellow bulldozers, your friend Ford Popular (or is it Consul?) keeps wittering on about the end of the world. . .yes, you've heard it all before.

But wait! That means that the answers to the problems are the same, right? Well, no, actually. Try lying down in front of these bulldozers, and you get run over.

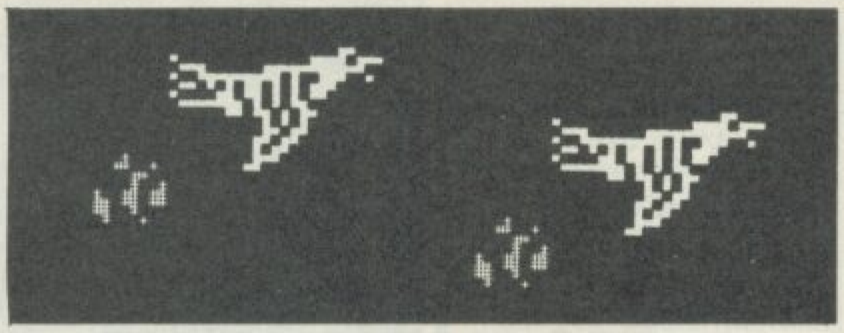
Unfortunately, there isn't enough originality to grab your interest.

That may seem like a strange thing to say of a parody adventure, but actually it's not enough just to twist a few ideas and make a few bad jokes. You have to work very hard at pastiches to make them funny, otherwise they get very dull, very quickly.

I think that Dented Designs would have been far better advised if it had written an entirely new plot around the same basic problems. There's nothing wrong with the actual puzzles themselves. They work fine.

I can't really recommend **Don't Panic – Panic Now,** unless you have a long wet Saturday to fill. There's plenty of quantity, but no real meat■

CITY SLICKER



In **City Clicker** you combat the forces of urban terrorism (as represented by a very dodgy racial stereotype Sprite in the shape of an Arab ie, it's got one of those cloth things over its head) and try to prevent the houses of Parliament being destroyed by a bomb.

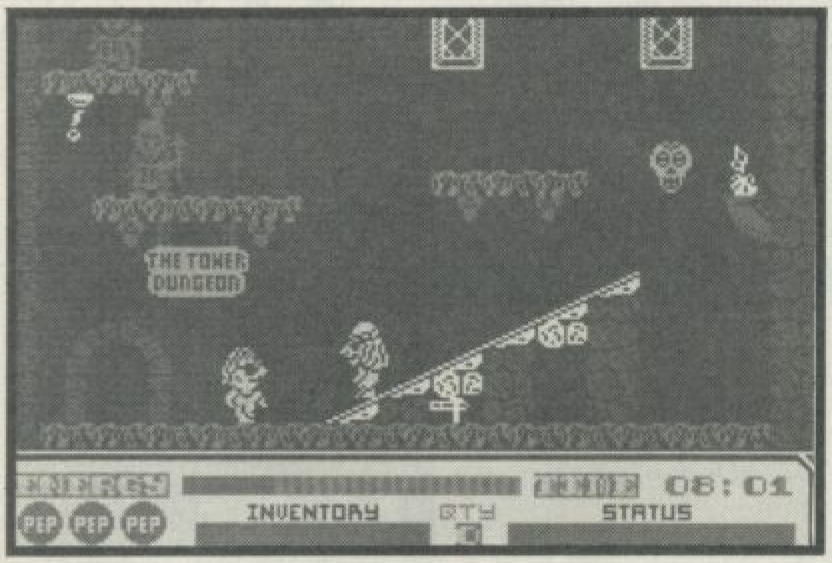
Not an objective I found it very easy to identify with.

Even more difficult to assimilate is the fact that **City Slicker** is, superficially, yet another **Manic Miner** game.

In fact, my first reaction on seeing it was of horror. I thought games like this had been relegated to the budget ranks long ago.

It isn't that simple, however. **City Slicker** is by the people who brought you **Technician Ted** which got mixed reviews but sold in zillions mainly because what the reviews hadn't realised was that whilst the game looked dull, it had a lot of clever puzzles, some of them fiendishly difficult.

City Slicker is pretty much the same. Its failings are similar and it might easily be dismissed but when you come to play it – well it's quite good fun. A sort of **Jet Set Willy** meets **Spellbound** in that your time is equally divided between working out how to jump over obstacles 'leap over the penguin when it nearly reaches the cherry then quickly drop down the whole screen whilst turning around. . .' and working out what object you can pick up does what 'having got the herring I should now be able to open the box and get the lathe to make the key to the door. . .'



FACTS BOX

Jet Set Willy meets Spellbound well-worn game ideas that shouldn't be entertaining yet somehow are

CITY SLICKER
Label: Hewson
Author: David Cooke and Steve Marsden
Price: £8.95
Memory: 48K/128K
Joystick: various

Reviewer: Graham Taylor

★★★★☆

The plot is all about assembling a bomb deactivator device. The various unlikely parts of the device are strewn around London as it would look if it comprised 50 caverns. Between some areas you can take the tube and thus rest your weary feet from all that intensive jumping.

Then there is this terrorist whose arrival is indicated by weird noises from your Spectrum. In fact there are dozens of odd little things, that redeem this game no end.

The graphics are well – how can I put this – they look like almost every single one of the **Jet Set** gang. There are telephones, cute little guards (beefeaters actually), 100 ton weights, platforms, sudden gaps, indescribable blobby things in fact the complete 'how to make a **Jet Set Willy** game' kit of sprites. They don't flicker too much, though there is the occasional attribute clash.

I quite liked the birds in Trafalgar Square whose air to ground bombings must be avoided on pain of death and was impressed by the poor herberts – people – you can pick up and treat as an 'object' dropping them from great heights on to nasty objects for example. The main virtue of the game is its puzzles, however.

In the cheat sheet handed out to reviewers, the solution to getting the first part of the deactivator ran to two pages.

I can't say this sort of thing fills me with much joy but for some it'll be game of the year■

DR WHAT

Oh No! Why did I get this? Doctor What! I mean there is a title that says "this is going to be a fun filled game that isn't the slightest bit funny".

I think it's supposed to be a spoof of Dr Who (he said pointlessly). A spoof if you think that Trydis rather than Tardis is funny. Doubtless CRL will ship a few before the BBC's lawyers start to send them nasty letters.

Dr What is a very basic **Spellbound**-style game. It has object that you pick up, store and use in various unlikely ways. You, the Doctor, are a large sprite, movement looks not so much jerky, more as if rigor mortice has set in.

The plot? Well there are these four Doctors (yes, four) called . . . What, When, Where and Why? Why? is the question I keep asking myself. Each Doctor has his (?) own tremendously amusing problem, although finding a key to the Trydis (usually just lying around) means you can zip off somewhere else.

To be generous there was one reasonably Okish sort of problem I came across – a cliff face to be climbed where the shape of particular rocks gave you a clue to a route up, get it wrong and you fall.

Mostly, however, the game is spent jumping up on tables and collecting objects that don't look like what the status screen says they are. If there is relatively little attribute clash it's only because of the lack of detail in most of the graphics.



FACTS BOX

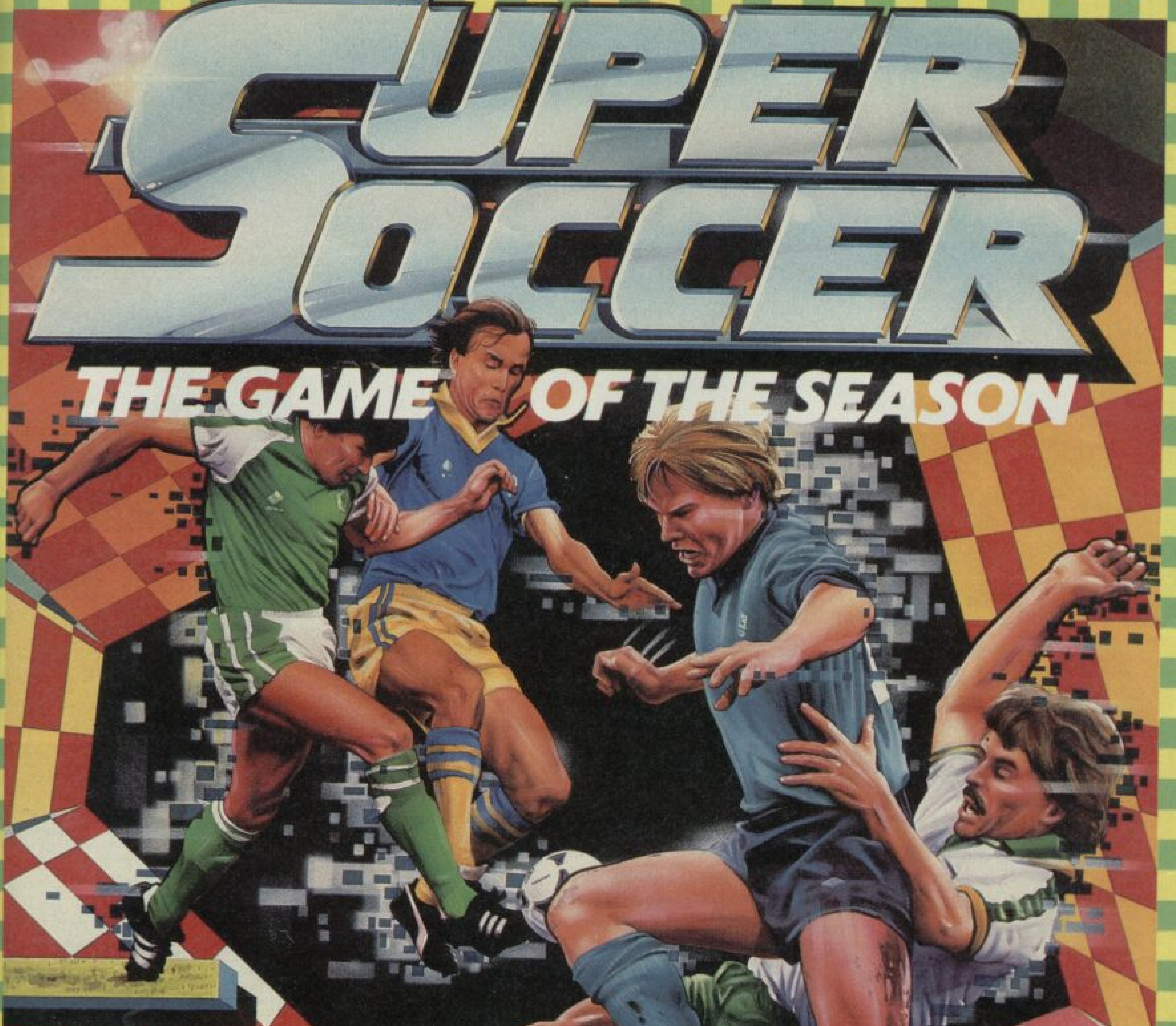
Tired variation on the Spellbound formula. Tries very hard to be funny but fails miserably. Better as budget

DOCTOR WHAT!
Label: CRL
Author: Software Foundation
Price: £7.95
Memory: 48K/128K
Joysticks: Cursor etc

Reviewer: Jim Douglas

★★☆☆☆

Surely it should have been a budget offering – it is certainly inferior to **Spellbound** and yet sells for £7.95. Maybe CRL are thinking of those legal costs■



imagine ...the name of the game

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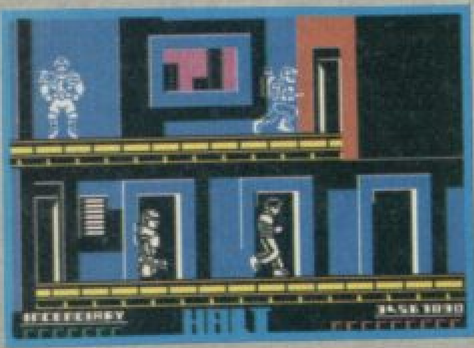
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Imagine Software (1984) Ltd., 6 Central Street, Manchester M2 5NS. Telephone: 061-832 6633. Telex: 669977 OCEAN G.

JUDGE DRE





Judge Dredd, the computer game. Coming soon from Melbourne House. Does it do any sort of justice? You play Dredd, as impersonated by a fairly convincing sprite.

The game plot isn't at all bad. Thankfully Melbourne hasn't tried to invent some sort of ridiculous special plot that enables them to include 50 different bouncing aliens.

The game is all about crime. Your task is to stop it – to stop every sort of crime from littering, to comic dealing (kids get addicted to them), to murder. Crime is a constant feature of Megacity One.

In Stage 1 of the game you have a map, a plan view of Megacity with icons representing the various kinds of crime scattered about as they happen. And you must use your judgement to decide what crime to go for first and what sequence of crime fighting will be most economical of time.

Time is of the essence because crime is breaking out all over the place and if more than eight misdemenours are happening simultaneously you get fired. For a Judge that's a fate worse than death.

Having selected a crime, the scene changes to a **Dan Dare**, esque representation of City Blocks, Megacity One and the Under City.

Most crimes occur high in the blocks but you'll need to cross the Megacity walkways and may sometimes be forced to venture down into the Under City where danger lurks in every crumbling corner. Dredd has to run around leaping between the walkways or leaping into lifts seeking out the crime and arresting or wasting the participants.

The representation of Megacity is reasonable but definately less shabby than the real thing – it all looks so clean. I like the views of distant grim tower blocks though. . .

Dredd may have to deal with



Maybe it doesn't matter all that much when a terrible Holiywood Blockbuster epic is turned into a terrible computer game.

But now there's a different and far more disturbing trend – the licencing of comic book characters.

In particular from *2000 AD* a comic much beloved by many of us SU hacks.

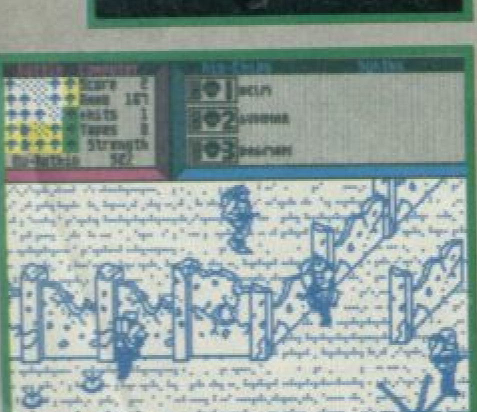
It's recently been looted of Rogue Trooper (gasp) and (gasp, gasp) Judge Dredd. Having spent many hours and more pounds rummaging through Forbidden Planet for previously unseen editions of the magazine we were concerned what kind of abominations would be produced?

We take a detailed look at Melbourne house's Judge Dredd project, review Rogue Trooper from Piranha and try to decide if anything like justic has been done ■



ROGUE





It says something for *2000AD* that it has been the source of so many ideas for computer games.

Now Piranha has lifted out **Rogue Trooper** to fight on the Spectrum.

Rogue Trooper, a sort of mutant Rambo of the future, battles alone against a relentless foe. His mission – to destroy a traitor who betrayed Rogue's GI buddies. The buddies are not actually dead. Their personalities are stored on microchips and in destroying the traitor Rogue will win their release. As you can see there is going to be a lot of serious killing in this game.

The game look visually very like **Commando** presented as a 3D scrolling game, big sprites and a true sense of perspective. This is good.

The gameplay is fairly complex – aside from destroying very many things, there are little icons representing the chipped buddies who offer advice ('kill, kill, kill', mostly) and things like stamina levels to be maintained etc. This is also good.

There are eight tapes to be collected – video recordings which together provide the evidence necessary to convict the traitor – and I found four of them on my second attempt at the game. This, I would have thought, is bad.

The game, though maybe not state of the art graphically is certainly in the first division. Big sprites which trot along (it has to be said that Rogue's walk is not very macho – more carefree

Second only to Dredd in *2000AD* mythology, Trooper is another lone man dispensing his own kind of justice in an inhospitable and barren landscape.

His objective has always been vengence – to find the traitor who turned his buddies into biochips and perhaps even return them to life.

In Nu-Earth where everybody else is crazed, Rogue Trooper is the only one still sane – and sometimes even that is in doubt ■

DD

other problems on his way to a crime. These are in keeping with the comic so full marks for authenticity. There are the Garbage Grinders into which it is a bad idea to fall. Sudden patches of ice send Dredd into an uncontrollable skid.



"You're next, punk!" What is it about Dredd that makes him probably the most powerful comic book character of the last ten years? In America you can probably take a degree in the subject.

Dredd is a different sort of superhero, he does some good in a world where because of claustrophobic tower blocks and high unemployment doing bad is understandable.

But for Dredd life in the slums of Megacity One admits no fudging of black and white. Judge Dredd's strength is that he is so certain of everything and so vigourous in his upholding of his sense of right. This frequently results in instant executiion on the street.

Put simply, Judge Dredd is a very right-wing sort of hero, with a sense of right and wrong not dissimilar to Charles Bronson in *Death Wish*. Judge Dredd would make a pretty good member of some parts of the conservative party, in fact ■

Conveyor belts convey him – usually into something bad. . .

In other places parts of the platforms and walkways between the city blocks may collapse and then there are the patches of alien seed that will grab hold of your boots and slow you up.

More animated obstacles include Maintenance Robots which get in the way, Satellats and Robo Hounds which will take pot shots at you if they can. Under City dwellers and Perps are also out for blood but are marginally (maybe) less dangerous. The remaining problem is passers by – innocent bystanders get in the way a lot and basically it's not a good idea to kill them although you don't lose serious points for it and actually it's quite a lot of fun blasting them.

Which brings us to Dredd's own special ways of dispensing justice.

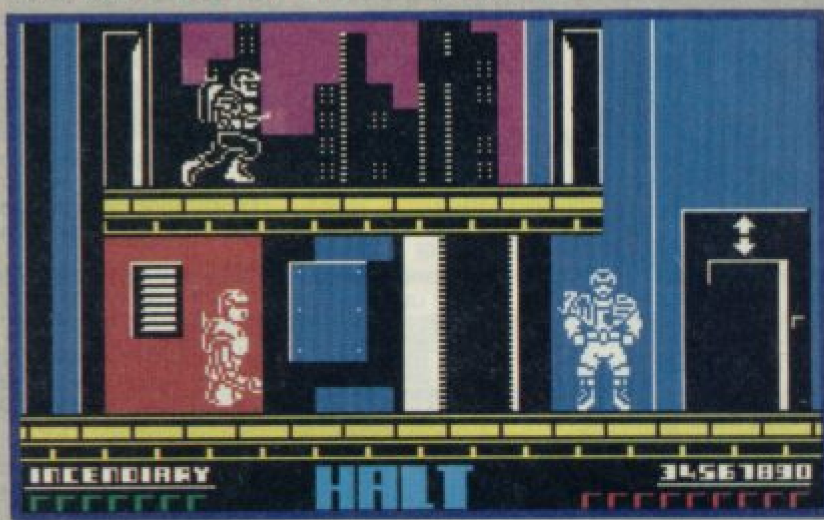
You have three attack options. You can elect to fire a warning shot – a speech bubble saying either 'Halt' or 'Blam' will appear. 'Halt' is OK but 'Blam' is not a very Dreddish word. If Dredd is close to another person the *Fire* button press is interpreted as a punch – it does as much damage as firing but looks funnier. The battle between Dredd and an escaping Perp is sometimes highly fraught – each successful hit only reduces the Perps stamina level – some Perps have a stamina level greater than yours – and they will certainly fire back. This is one of the really good things about Dredd – the fights are genuine fights.

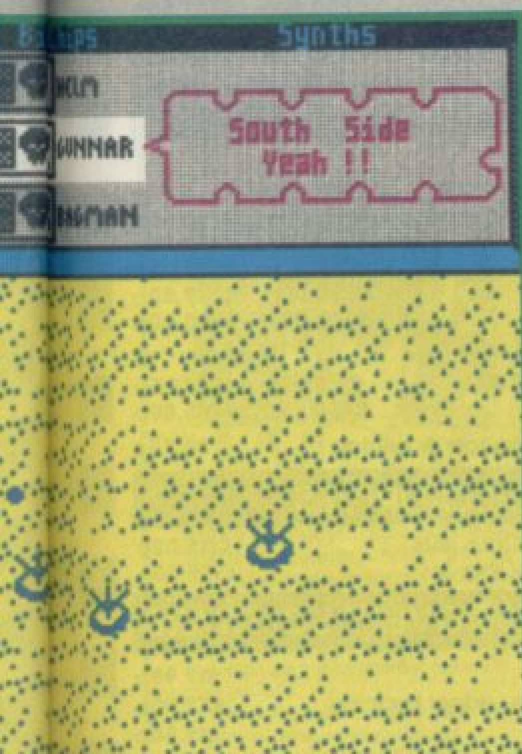
ARCADE

Graphically I rate the game (a pre-production version I should stress) as pretty close to **Dan Dare** in style.

As a recreation of the style of the comic book it's really not bad at all though – in the end it comes down to a lot of continuous tension and gung-ho shoot-em-outs (not ups).

It's retained a certain portion of the black humour to be found in the original comic book and for that let's give thanks. We haven't stuck any sort of rating on it because the Spectrum version wasn't close enough to completion but it's looking very promising■





TROOPER

really) smoothly and quite detailed backgrounds. The restriction to two-colour gives no attribute clash but makes things a little difficult to see on some screens – particularly yellow on white is a bit distracting.

Although clearly a large part of the point of the game is kill and not being killed, the speed at which everything happens is very restricted. Because of the large number of big sprites moving about at the same time it's all a bit slow and this detracts seriously from the challenge of the game. It is comparactively difficult to be caught unawares and your fire button is hardly likely to suffer damage when your bullets stroll nonchalantly across the screen.

FACTS BOX

Nice to look at but just not fast enough to crack it as the sort of arcade action game it is supposed to be

ROGUE TROOPER
Label: Piranha
Author: Design Design
Price: £9.95
Memory: 48K/128K
Joysticks: various

Reviewer: Graham Taylor

★★★☆☆

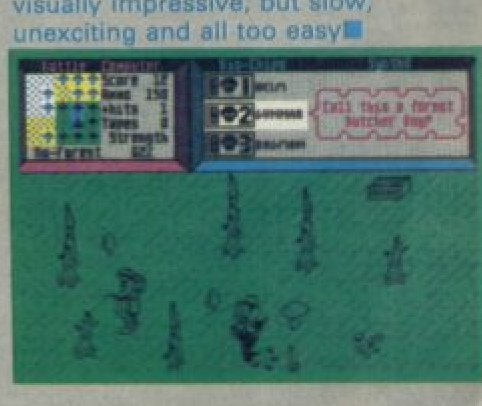
The game is large (100+ screens) and there is some variety to the landscapes – mixed areas of desert, barbed wire and burnt-out ruins. The latter are more exciting since there is an opportunity to shoot through holes in the walls (tricky programming stuff that) and use corners as cover. Things almost get exciting.

Whilst shots from assorted enemies are relatively ineffective – you need to be hit a lot of times before it matters much – treading on a mine is instant death. This would be a source of potential tension in the game were it not for the fact that it is quite easy to avoid them. The only time I died from a mine was when moving from one screen to the other.

The problem with **Rogue Trooper** is that it has the wrong plot for this style of game. The slick big graphics cause the speed of movement to be restricted and that means it can't succeed as a high-action blast 'em game.

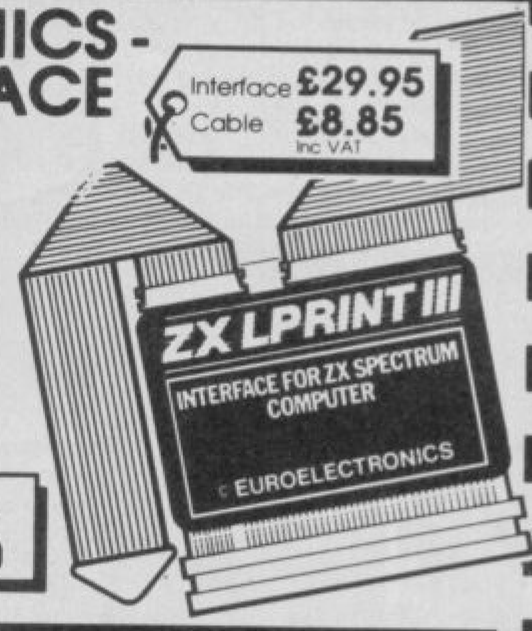
Conversely there isn't really enough in it to turn it into a 'find the objects and figure out what to do with them' affair.

I think most people will find it visually impressive, but slow, unexciting and all too easy■



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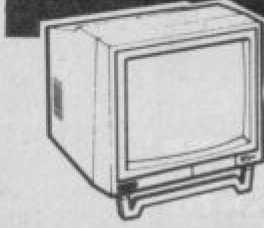
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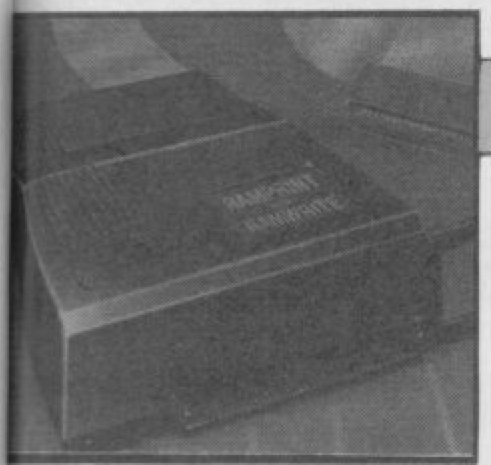
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Write or Rom?

Ram Electronics, no doubt flushed with success after its Music Machine, has produced the RamPrint parallel printer interface. Why splash out for this one rather than others available?

Ram has tried to make it more than just another port. For starters, there's the joystick port for those who play, as well as write, classics. The built-in printer driver software and Centronics cable are fairly standard, I suppose, but the ace is **RamWrite.**

RamWrite is a word processor. It's built into the interface on Rom in much the same way as Basic is built into your Spectrum, so it's available as soon as it's turned on.

Typing *LPrint* "© word" gets things going. **RamWrite** revolves around two windows, the biggest of which is used for editing. This takes up the top 21 lines of the screen and displays the document being worked on. The bottom three lines make up the command and status window. *Loading* and *Saving* files, finding, replacing and deleting bits of text all take place here. Typing *E* in the command window starts you editing in the big screen. *Break* gets you back to command level.

The commands are all fairly simple, single-key, and the repertoire is fairly limited. As well as the main commands above, there's a 'display text before printing' option. This shows your opus on screen pretty much as it will appear on paper. The display can be in either 32-or 64-column text, but unlike **Tasword** you can only edit in 32-column mode. The software can use tape or Microdrive without problem.

Editing is simple enough. Word-wrap and justification aren't shown on screen whilst editing is in progress (that's what the display text option is for), but end of paragraphs are.

As this is all happening in a printer interface, you might reasonably expect printer options aplenty. There are. There's the usual condensed, double-width, bold and underlining available, but there are also facilities to send any sequence of codes to your printer. So, no matter how peculiar and non-standard your facilities are (and some people's are right weird), **RamWrite** should be able to get at them.

That's about it for the word processor. It's a fairly simple beast, more suited to letter writing, invoice printing and similar small jobs than thousand-page theses, but none the worse for that. It took me about ten minutes to get everything going for the first time with my trusty Taxan (Epson compatible) printer. Not bad.

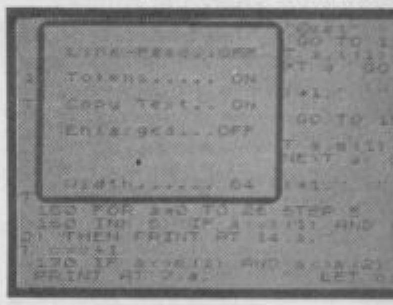
Then there's the printer interface side of things. Using *LPrint* from Basic does the business with little or no problems, and you have the choice of expanding tokens or just sending the codes straight through.

There are two kinds of *Copy*. One does a conventional (if squashed) pixel by pixel copy of the screen on to the printer; the other is much faster, and just copies characters from the screen. This is the mode that the Ramprint starts up in.

The documentation leaves a lot to be desired. It's eight pages of paperback size, photocopied dot-matrix output. It's fairly incomprehensible at times and with more than a couple of spelling mistakes. Common sense is usually enough to drive the product, but there's nothing in the handbook about running the interface from machine code, or any of the common word processors. Which is a shame.

Niggles notwithstanding, Ram has produced another little cracker. It's a good idea, and quite nicely implemented. Not as exciting as the Music Machine, but, in it's own way, just as worthy of success ■

Rupert Goodwins



SURGERY

Sinclair Surgery

Spectrum on the blink? Rupert Goodwins has a cure

Yet another Saga

I am thinking of getting a Saga 1 Emperor keyboard for my Spectrum+. How do you fit one to a Spectrum? Is there any soldering involved, and how complicated is it? Can Microdrives and other bits be connected without any trouble?

Alex Showell
Eltham
London

● *The Saga keyboards, like most keyboards, don't need any soldering, but you do need to take your Spectrum printed-circuit board out of its case before putting it into the Saga. Any add-on that fitted your Spectrum before the metamorphosis should fit afterwards without any problems.*



The easy-to-fit Saga

No hope on hi-res

I've got a 48K Spectrum, a Kempston centronics Interface (software on tape) and an Amstrad DMPI dot matrix printer. The text software works, but none of the high-res programs will produce hi-res copies of the screen. And I'd like to know how to produce double width, and so on. Help! Bye.

R Tait
North Island
New Zealand

PS You're one of the best computer magazines I know.

● *The Amstrad DMPI is a little long in the tooth nowadays, and it can't cope with standard high resolution commands. You can send it a stream of bytes to print out as a graphics image. To send a chequerboard pattern try:*

```
10 LPRINT
CHR$(27);"K";CHR$(0(;CHR$(20);
20 FOR F=1 TO 20: LPRINT
CHR$(BIN 10101010); : NEXT F
```

Change the 1s and 0s after the Bin in Line 20 to change the pattern. If you want to copy the screen to the printer, have a look at the screen dump program on Page 79 of the September issue of SU, but omit lines 10,20,30 and 110: and change Line 50 to

```
50 LPRINT CHR$ 27;"K";CHR$ 1;
CHR$2:
```

See the reply to Pauline Winter elsewhere this page for more about this program

The DMPI only has a single special mode of printing text, and that's double width. Turn it on with Chr$(14), and off with Chr$(15).

PS And it's getting better...

Interface and family trace

Can you help me with the following: a) Can an adaptor be purchased to connect a Spectrum+ with a QL monitor? b) Is there a program available for the Spectrum+ to cater for genealogy, as I have a number of tables I would like to put on to the computer.

E.Wolleson
Ruislip
Middlesex

● *a) Yup, try Transform on 01-658 6350. b) Programs for genealogy don't grow on trees, y'know! Seriously, there was one for the Spectrum from an off-shoot of an engineering firm in, I think Leicester, but I can't remember their name – it was years ago now. If anyone else can remember their name write to me (c/o Sinclair Surgery) and between us we'll tell the world*

Spectrum power struggle

A friend plugged in a ZX Printer to my old faithful 48K Spectrum when the power was on. Now *Save* and *Load* with *Code* work fine, but trying to write any *Basic* program puts funny things on the screen and it crashes. *Clear* works over 32,000, but not under 25000. I think it's the 16K Ram that's faulty, but I'm not sure.

Jari Komulainen
Turku
Finland

● *A major problem with Spectrums is this plugging of stuff in with power on. Much damage can be done. In your case (black ABS plastic), it might be the 16K Ram chips (type 4116), the ULA or even the Z80.*

Hit the speed limit

I read that the Loki would use a Z80H, which is compatible with the Z80 used in the Spectrum, but twice as fast. Could I get one and replace the Z80 in my Spectrum with it, and would it go faster? Might I need some extra components, like a new crystal? Could I switch between the two?

Nick Clarke
Rowley Regis
Birmingham

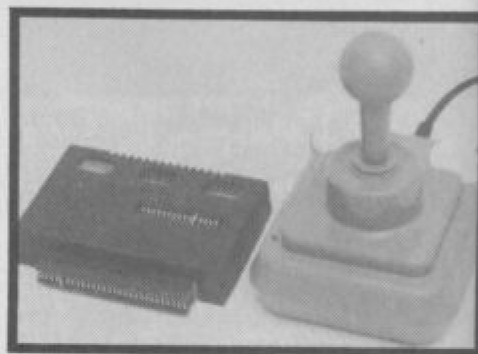
● *An old favourite, this. Yes, the Z80H does waltz along at twice the speed of the humble Z80A hidden deep within your Spectrum, but just replacing one for t'other would do no good, as the Z80 (A or H) is told what speed to go at by the rest of the Spectrum's circuitry. As you seem to be aware, the speed of the whole caboodle is set by a quartz crystal, and while doubling this speed would indeed make a Z80H run at twice the speed, the rest of the circuits wouldn't be able to cope. Nice try, though!*

Connecting with Timex

I have a Timex 2068 and I want to add a joystick interface to it. Since the two joystick ports built in don't work with any software that I can run, can I connect a Kempston joystick interface (or any others) to it?

Orjan Kjellberg
Goteborg
Sweden

● *The safest interface to use would be an Interface 2 from Sinclair or any interface that supports Interface 2 type software. The extra circuitry in a 2068 might well interact with other kinds. Interface 2s are in short supply at the moment, so try Ram Electronics or Kempston.*



A compatible interface

Bunged up Biorythms

Help! I've got a Spectrum 48K, Interface 1 and a Brother M1009 printer. I want to copy the screen to the printer, as I've got a biorhythms progam, but it just prints ???'s from the *Print* option.

I've tried the program in the September Surgery, but I can't find *Chr#* (Line 30), and Line 70 won't go in, even if I threaten to throw my Spectrum out of the window!

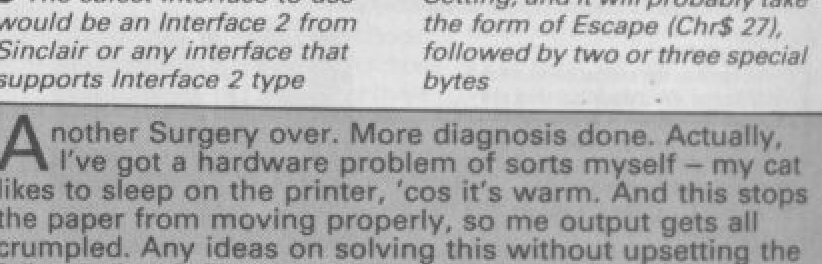
Pauline Winter
Maidstone
Kent

● *Er yes, the gremlins old escape from the back of the mag to get to the listing in September's Surgery. Line 30 should be Chr$ – not Chr#. The bit of Line 70 that's kerpiffle is the bit that goes: +2*POINT)x ,y+1)+4*POINT. It should read: +2*POINT)x,y+1)+4*POINT.*

This program will only work for Epson compatible printers. If your Brother isn't, then change Line 50 to cope with whatever the special codes are that it needs. Printer manuals invariably have this information hidden away as 'Graphics Printing Mode', or Bit Image Setting, and it will probably take the form of Escape (Chr$ 27), followed by two or three special bytes

Another Surgery over. More diagnosis done. Actually, I've got a hardware problem of sorts myself – my cat likes to sleep on the printer, 'cos it's warm. And this stops the paper from moving properly, so me output gets all crumpled. Any ideas on solving this without upsetting the feline at fault? Strange how printers seem to cause problems...

And don't forget, keep exercising that keyboard. We don't want to see any flabby rubber now, do we? Come back in a month's time for another checkup, and a repeat prescription.



Rubot rides out

Them that know reckon that the hardware is only as good as the software. With Rubot the hardware's pretty good, but the software depends on what you do with the poor thing.

Owners of buggys invariably take a delight in making their beasts bash against the nearest solid objects and turn away in a daze. What the psychologist calls a conditioned response.

Others take great pleasure in pursuading their hardware to engage the cat in hot pursuit. Shrinks everywhere know this as out and out nastiness.

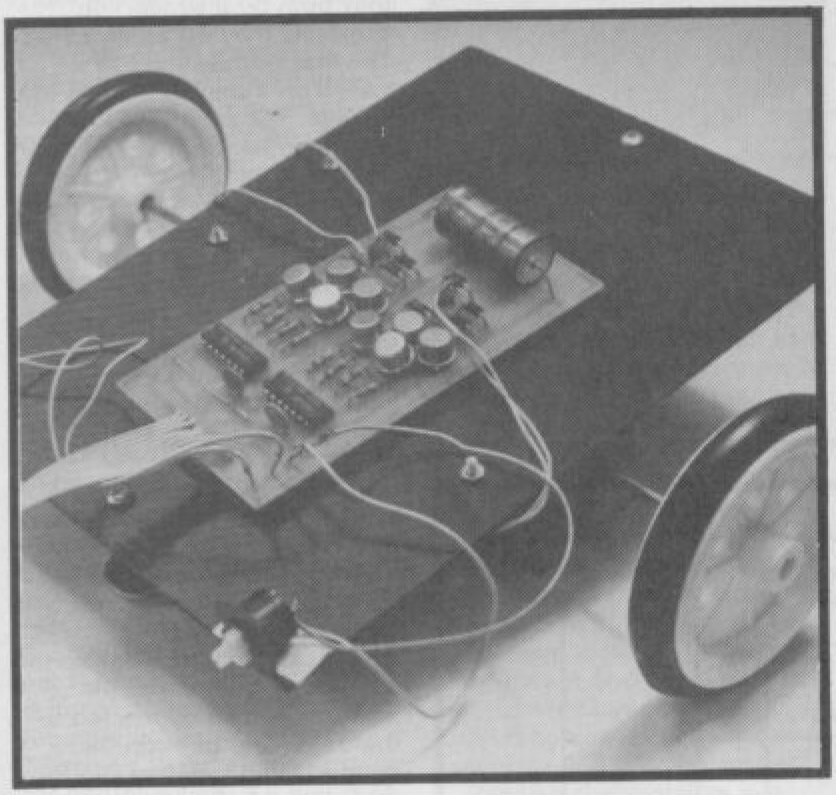
So here are two programs to give the Rubot a chance to sample the joys of dubious droidery.

Program 1 is a very basic Basic maze-learning program. Even that's being a bit grand. All it does is trundle Rubot forward until it hits something bigger than itself. Then Rubot turns until it gets an all-clear ahead, and then continues. The clever bit comes when you press a key on your Spectrum. With heartwarming faith and Mensa-like intelligence Rubot will return to its starting point without hitting anything. At least that's the theory.

Program 2 is a bit simpler. All it does is make Rubot respond to Interface 1/128K+2 joystick commands.

If you're feeling particularly bright you might like to combine Programs 1 and 2 so you can teach Rubot a path using a joystick■

NOTE: Depending on exactly how your Rubot is wired you may need to swap the values for *Forward* and *Back* in Line 140 of both programs. Similarly, *Left* and *Right*, and *Bumpleft* and *Bumpright* may need a little juxtaposition



```
100 REM  Rubot Maze Trace
110 REM  (c) Rupert Goodwins
120 REM         1986
130 REM  set up everything
140 LET left=9: LET right=6
150 LET forward=10: LET back=5
160 LET bumpleft=223: LET bumpright=239
170 LET bumpboth=207
180 DIM a(200,2): LET stage=1
190 GO SUB 390: REM start clock
200 LET dir=forward: GO SUB 430
210 IF IN 31<>nobump THEN GO TO 240
220 IF INKEY$<>"" OR stage>198 THEN GO TO 310
230 GO TO 210
240 IF IN 31=bumpleft THEN LET dir=right
250 IF IN 31=bumpright THEN LET dir=left
260 IF IN 31=bumpboth THEN LET dir=back
270 IF dir=forward THEN GO TO 210
280 GO SUB 430
290 IF dir=back THEN LET dir=left: GO SUB 430
300 LET dir=forward: GO SUB 430: GO TO 210
310 REM Now retrace steps
320 LET time=a(stage,1)-a(stage-1,1)
330 OUT 31,15-a(stage,2): REM reverse step
340 GO SUB 390
350 IF FN t()<time THEN GO TO 350
360 LET stage=stage-1: IF stage>1 THEN GO TO 320
370 OUT 31,0: STOP
371 REM Read timer
380 DEF FN t()=PEEK 23672+256*PEEK 23673
390 REM Start timer...
400 POKE 23672,0
410 POKE 23673,0
420 RETURN
430 REM change direction
440 OUT 31,dir
450 LET a(stage,1)=FN t()
460 LET a(stage,2)=dir
470 LET stage=stage+1
480 FOR f=0 TO 300: NEXT f
490 RETURN
```

```
 100 REM Rubot Joystick Jive
 110 REM (c) Rupert Goodwins
 120 REM         1986
 130 REM set up everything
 140 LET left=9: LET right=6:  L
ET forward=10: LET back=5
 150 IF INKEY$="9" THEN OUT 31,f
orward
 160 IF INKEY$="8" THEN OUT 31,b
ack
 170 IF INKEY$="7" THEN OUT 31,r
ight
 180 IF INKEY$="6" THEN OUT 31,l
eft
 190 IF INKEY$="" THEN OUT 31,0
 200 GO TO 150
```

How it works – the techy background

To the novice roboteer, the circuit diagram seems daunting. The trick, like software, is to look at each bit by itself and when you understand how it works try and fit it all into the rest of the robot.

Let's start at the motors. These, let's face it, do all the hard work of hauling the rest of the unit about. Rubot has two, one for each driver wheel. They run from DC, so if you put a 5V torch bettery across the motor terminals it'll turn. If you then reverse the battery, the motor will run in the opporite direction.

This useful little trick is put to work in the steering of Rubot. When power is applied to both motors in the same direction at once, the unit will head off in a straight line. Reverse the supply to the left-hand motor, for example, and the left-hand edge of the unit will suddenly try and move backwards. As the right-hand motor (and attached edge) is still resolutely ploughing forwards, Rubot will execute a smart anticlockwise spin until both motors are set in motion in the same way again. This trick reversed can, of course, be used to turn the unit clockwise. So Rubot can turn.

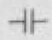
So we need to be able to reverse the voltage to both motors. It would be nice to be able to stop the things as well.

To reverse the motors, we need to connect either of each motor's two terminals to either +5 volts or 0 volts. If we connect one to +5 volts, and the other to 0 volts, current flows one way and the motor spins. reverse the connections, and it goes in the other direction. Connect both to 0 volts, or both to +5 volts, and no current flows, so the motor just doesn't go.

When you've got that little lot clear, have a gander at the circuit diagram for the Motor Board – Diagram 1. In the middle you'll see two symbols which stand for the two motors. They look like this:



Each straight line on the circuit diagram stands for a connection. So, looking at one of the motor symbols, you'll see two straight lines appearing out of the side. These are the motor terminal lines. The first thing that's attached to these lines is one of these:



This is called a capacitor, and its job is to keep the motor clean. Electric motors can make an awful lot of electric rubbish – if you've ever tried to listen to a radio when someone's using an old, unsuppressed hair drier you would probably have heard the rubbish as noise on the frequency you were listening too. The little motors in Rubot can make a lot of noise too, and that can interfere with the rest of the circuit and even (horrors) your Spectrum. The capacitor catches the rubbish and disposes of it before it can get out and on the rampage.

Next on the motor lines, you'll see these:



These are called diodes, and they do a similar job to the bits of electrical rubbish that are too meaty for the capacitor. Now we come to the business bits, the transistors. Transistors are the stars of the show, and look like this:



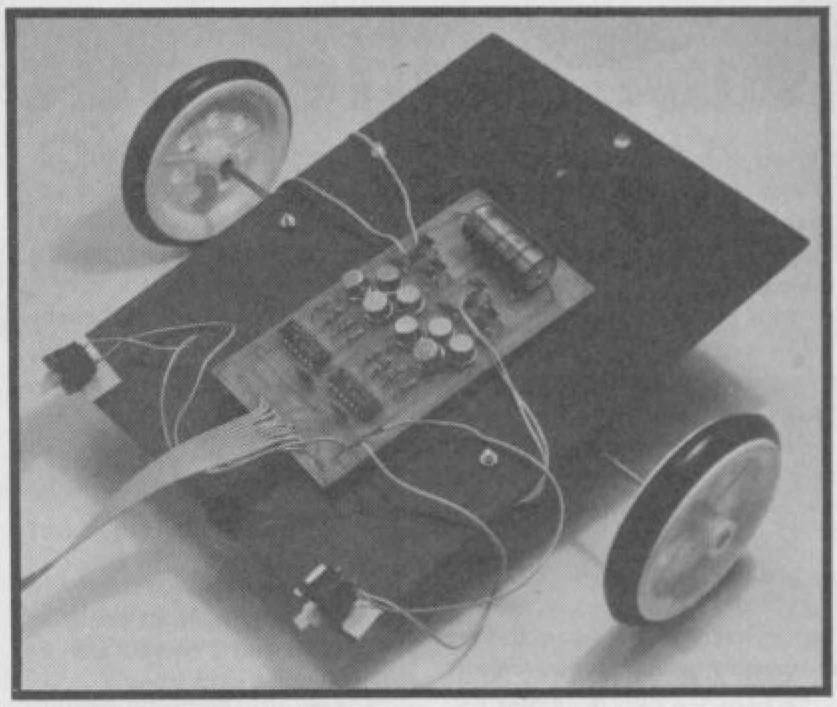
PNP and

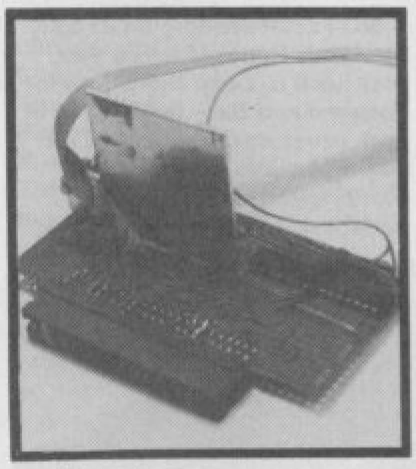


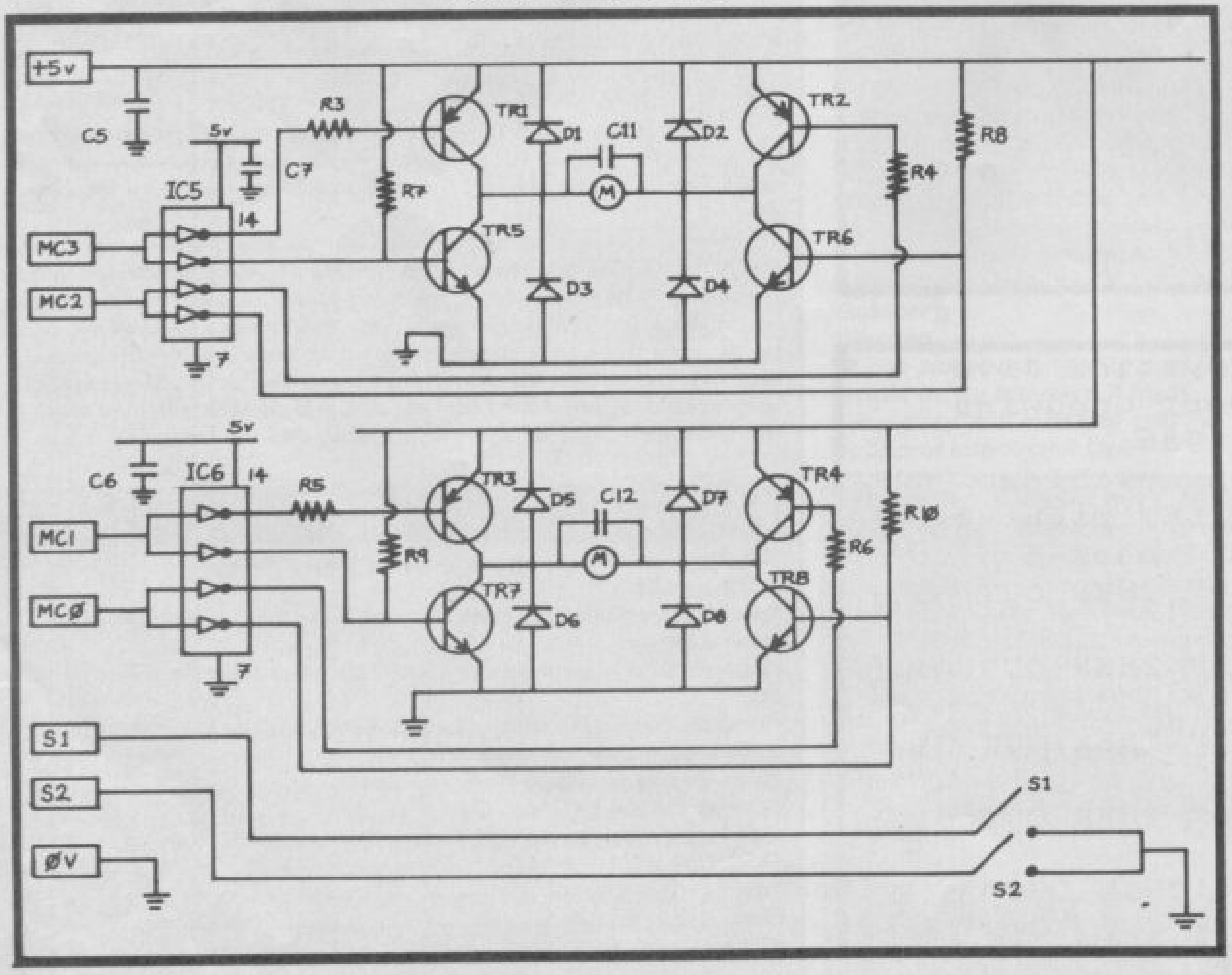
NPN. There are two types, but they both do a similar job. Basically, they act as switches. The first kind (called PNP) switch on if they're given a low voltage. The second (NPN to their friends), switch on if they see a high voltage. You'll notice they have three connections each. The connections are called emitter, base and collector (E,B and C on the picture above). The reasons for these names are lost in the mists of time, but you apply the voltage to the base, and the switch closes between the emitter and the collector.

Back to the circuit diagram. Have a look at the bases of TR2 and TR6. If these both receive a high voltage then TR2, being a PNP transistor, will turn off, and TR6, being of the NPN persuasion, will turn on. So the motor line (remember the motor?), will be connected to the 0 volt line through the connector and emitter of TR6. Whoopie, I hear you cry. But wait, cynics. If you look at the other side of the motor, you'll see an identical bit of circuit, involving TR1 and TR5 in much the same way as TR2 and TR6 were configured. If we take the bases of these transistors low, then TR1 will turn on, (PNP, remember) and TR5 will turn off. This connects the other side of the motor to +5 volts, and whizzzzz! The motor will run.

So why not just connect the voltages straight to the motor, instead of through this complicated transistor business? (If you don't understand the question, then take a short break, play **Light**







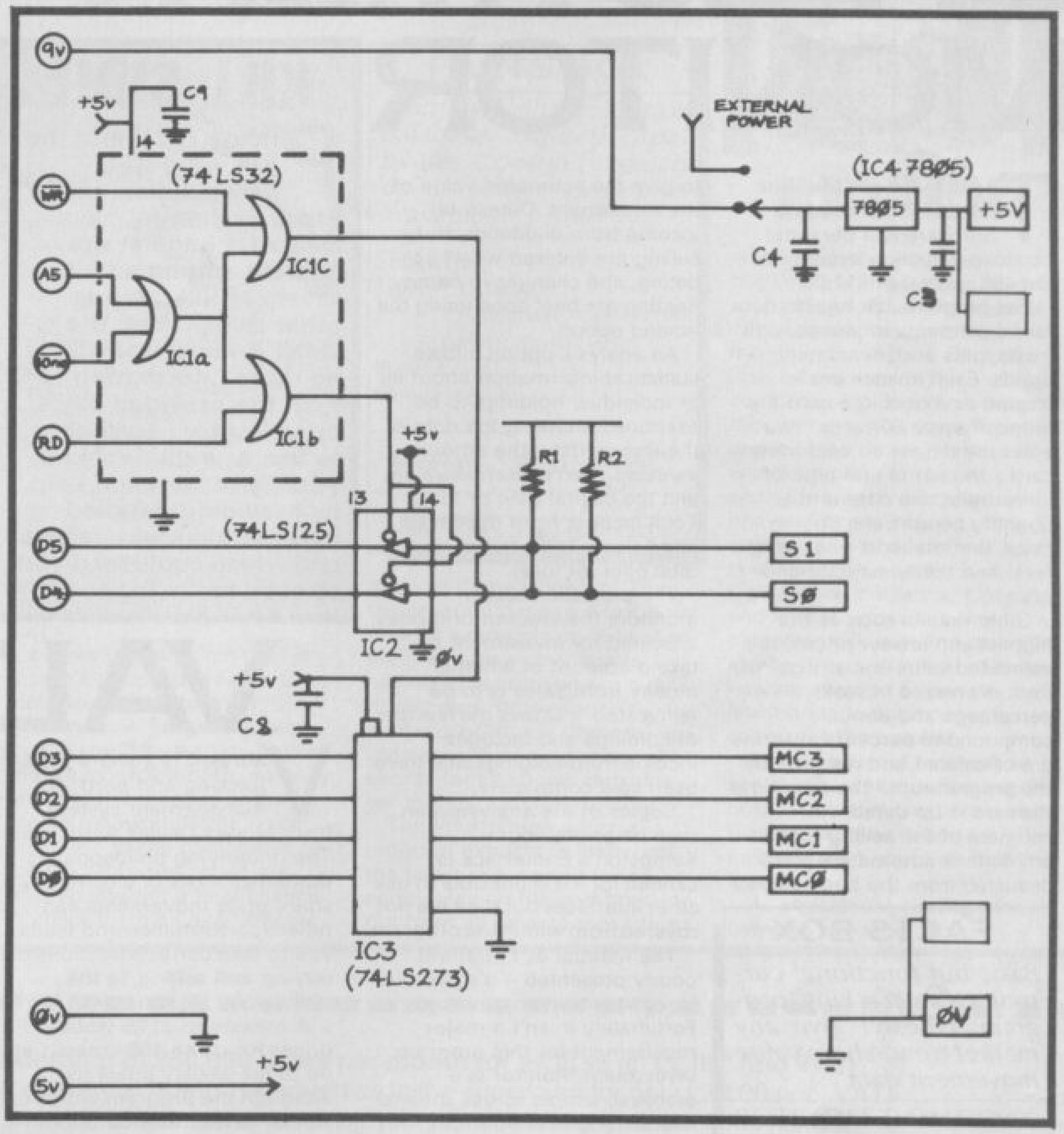
◀Diagram 1: The motor board. This is the circuit that is mounted on to the Rubot itself.

Force, and try again.) The transistors are needed as the motors are greedy brutes and need quite a lot of power. But the computer is a subtler beast, and is only happy when dealing with little tiny snippettes of electricity. The transistors operate like switches: a little bit of power from the micro is enough to switch on or off the big power to the motors to keep them wheels a'turning. They still need a bit more than the computer can deal with, so IC5 and IC6 (with the help of resistors R3 to R10) do a little more power-level conversion to the signals from the interface board to feed the transistors. This business of converting power levels is called amplification, and is exactly what your hifi amp is doing when shoving a tiny little signal from a record player cartridge through your masso-whumph 100 watt speakers.

So we've tracked the signals down to the interface board. These signals (MC0 to MC3, for Motor Control) switch the terminals of the motors between +5 volts and 0 volts. Since this is a computer-controlled beastie, it would seem a good idea to switch MC0 to MC3 from the computer. That's what ICs 1 and 3 are there for. IC1s job is to detect when the computer wants to send out a signal. It manages this by constantly looking at IORQ and A5. A5 is an address line, and the computer uses this to identify which peripheral to talk to, like the loudspeaker, cassette or keyboard. A5 isn't used by anything within the Spectrum, so we can snaffle it. IORQ signals that the computer wants to use a peripheral rather than memory. So when both A5 and IORQ are active, IC1 knows that the computer wants to talk to Rubot. If it wants to write to Rubot, which is when it sets MC0 to MC3, then it also makes WR (write) active. If it wants to check the switches, then it makes RD (read) active. IC1 detects both of these, and switches in the appropriate bit of silicon. IC3, when switched on, copies data from the computer to MC0 to 3. Its speciality is that, when it's switched off again, it remembers that data and keeps it on MC0 to 3. So the computer just needs to write the information once, and can then get on with something else. Until it comes up with some new data, IC3 will remember.

Reading the switches is a similar sequence. IC1 turns on IC2 instead of IC3, and IC2 copies the information from the switches into the computer. Unlike IC3, IC2 turns off completely when not selected.

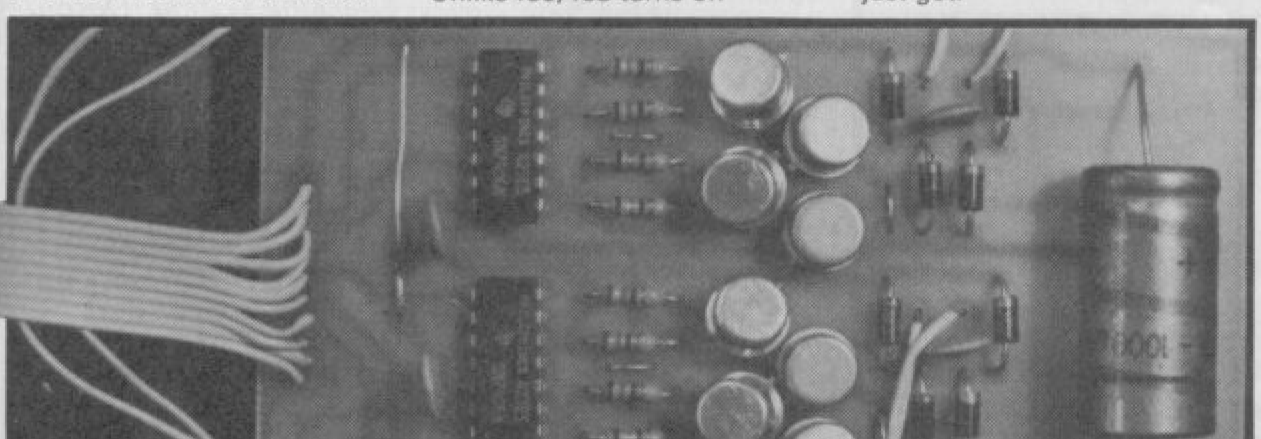
Address line A5 corresponds to Address 31. The Basic command *In* 31 will tell the interface that the computer wants to read the switches, and will come back with the status of those switches. If neither are closed, then it'll come back with 255 (as everything will be high). The switches are connected to D4 and D5, which have decimal values of 16 and 32, so if the switches get closed, these lines will go low, and their value will be subtracted from that 255 we just got.



▲**Diagram 2: The interface board which plugs into the Spectrum**

The command *Out* 31, number writes that number to the data line. If you do *Out* 31,1, then D0 will go high. 2 will put D1 high, 4 D2 and 8 D3. Any combination of the above numbers will put the equivalent combination of D0 to 4 high, and the motors will spin!

The last bit of silicon skulduggery concerns IC4. This is a voltage regulator, and keeps a nice, steady voltage going to the motor board even when the motors are chopping and changing. IC4 can get its power either from the Spectrum or from somewhere else. It can take the power from the Spectrum if you have just such a power supply, but ordinary 48K and Spectrum + users are unlikely to be so lucky. To find out, read the label on the base of the power supply. If it says 2A or more, you're OK. If it's less than that, then you'll have to connect a 9 volt power supply or large 9 volt battery (like PP9) to pin 1 of IC4, and not connect it to the 9V line of the Spectrum ■



INVESTMENT MONITOR

The Investment Monitor from Michael Slatford Software is a personal portfolio valuation system for the 48K, priced at £12.00.

The program can handle data for investments in shares, unit trusts, gilts and investment bonds. Each investment is treated as a card in a card-file index of up to 50 cards. You enter the details on each new card – the name and type of investment, the date and quantity bought, the buying price, the total cost (including fees) and the latest date and price.

Other details such as the highest and lowest prices, the estimated value and any gain or loss, expressed in real, percentage and annual compounded percentage terms are calculated and retained by the program until the next time the card is up-dated. An estimate of the selling fees at any time is automatically deducted from the book value to give the estimated value of the investment. Details of income from dividends and selling are entered when up-dating, and changes in name or holding are best done using the amend option.

An analysis option allows statistical information about all or individual holdings to be examined showing the date of the last up-date, the amount invested, the realisation value and the capital gain or loss. Total income from dividends and sales is included to give a total gain (or loss).

The portfolio section monitors the amount of money allocated for investment by taking account of whether money from sales is to be reinvested. It shows the number of holdings and includes income from holdings that have been sold completely.

Copies of the analyses can then be printed out – Kempston's E interface is catered for – it is possible to use other interfaces but they are not covered from within the program.

The manual is, I'm afraid, poorly presented – it's just five loose sheets in an envelope. Fortunately it isn't a major requirement for this program. **Investment Monitor** is a practical, simple to use means of watching how your investments are doing. It doesn't set out though to show what those investments may do in the future.

A QL version which is compiled and runs faster with room for up to 90 investments, details of a building society account, that lets income be zeroed at the start of a year and will realise capital gains is also available for £20.00■

FACTS BOX

Basic but functional current value tracking program. Doesn't give any market trend/share value movement data

INVESTMENT MONITOR
Label: Michael Slatford,
3 Campden Road, South Croydon, Surrey CR2 7EQ
Price: £12.00
Memory: 48K

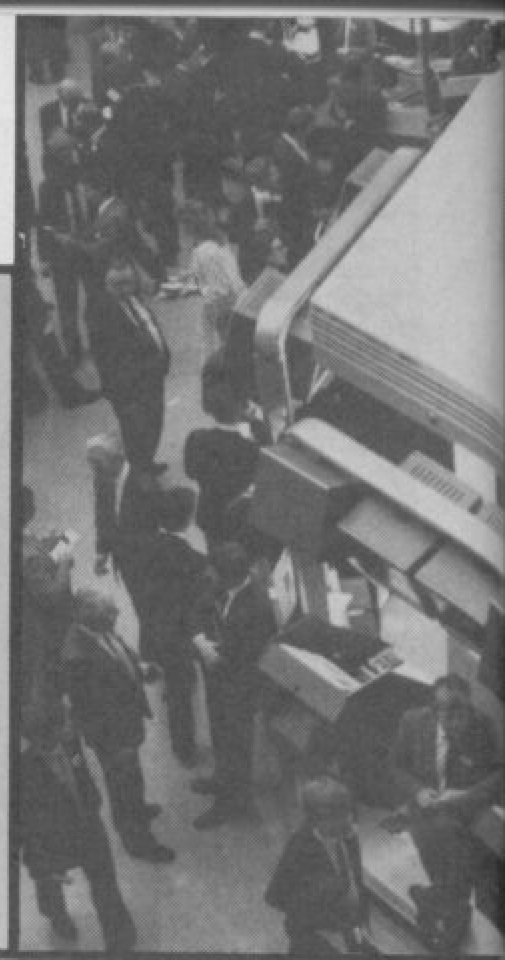
Reviewer: Mike Wright

★★★★☆

"TOTALS" AT 29/12/1984	
UNITS	
Total Investment	£7427.36
Total Realisation	£20196.95
Cap. Gain (171.93%)	£12769.59
Total Dividends	£2022.70
Total Income	£1595.34
Total Return	£21792.29
Total Gain (193.41%)	£14364.93
BONDS	
Total Investment	£4000.00
Total Realisation	£5870.69
Cap. Gain (46.77%)	£1870.69
Total Withdrawals	£450.00

KILL SID!!

Privatisation and the Big Bang (the deregulation of the Stock Exchange) have created a huge surge of interest among small savers in Sid, among other things. Yet, the small investor may have no more information than the previous day's price from a newspaper to use as a guide. Now your Spectrum can help by providing detailed information and analysis and which could lead you to even make money!!



VALTRAK

Valtrak 4 is a share price-tracking and portfolio management system from Morley Davies Associates. The underlying philosophy is that an analysis of a company's share price movements can reflect performance and leads you to take correct decisions on buying and selling, ie the philosophy of a chartist.

A maximum of 26 weekly prices for up to 100 entered at up to six weekly intervals although the program works on weekly prices. The data for missing weeks will be automatically extrapolated. Once the records are in place they will need to be up-dated regularly with the latest prices. Usually this will mean an up-date of all the prices in a file. Even the authors agree that this is a chore and estimate, conservatively in my view, that to up-date 80 records takes about 20 minutes. Alternatively an interim up-date will restrict the up-date to only those companies where stock is held. At the end of the up-date this option moves straight to a valuation of the portfolio. For this purpose shares are valued at 4 per cent below the latest price to take into account selling fees. The records can also be erased, amended or moved around the file, allowing names to be changed or groupings altered for easy entry of data. Analyses of the data are provided through the *Select Record* and *File Surveys* options on the main menu.

Select Record deals with the individual records and produces 5- and 13-week moving averages, weighted and unweighted, for raw and adjusted (large changes are reduced to less than 10 per cent) prices. A wide range of graphs can also be produced and copied, including log graphs for fast moving prices.

Analyses for all records on file are produced via the *File Surveys* option and include posture tracking. The posture of a share as rising, positive, neutral, negative or falling is determined by comparing the 5 (short) and 13 (medium) week weighted moving averages with the actual prices.

Although **Valtrak 4** can be used from cassette, Microdrive or disc and with either a Sinclair or 80-column printer the manual seems to suggest that only the Technology Research Beta+ disc interface is suitable. While only the use of Morex, Kempston (E) and Lprint III printer interfaces are coded into the program. While a manual of 40 pages looks very intimidating, especially when it

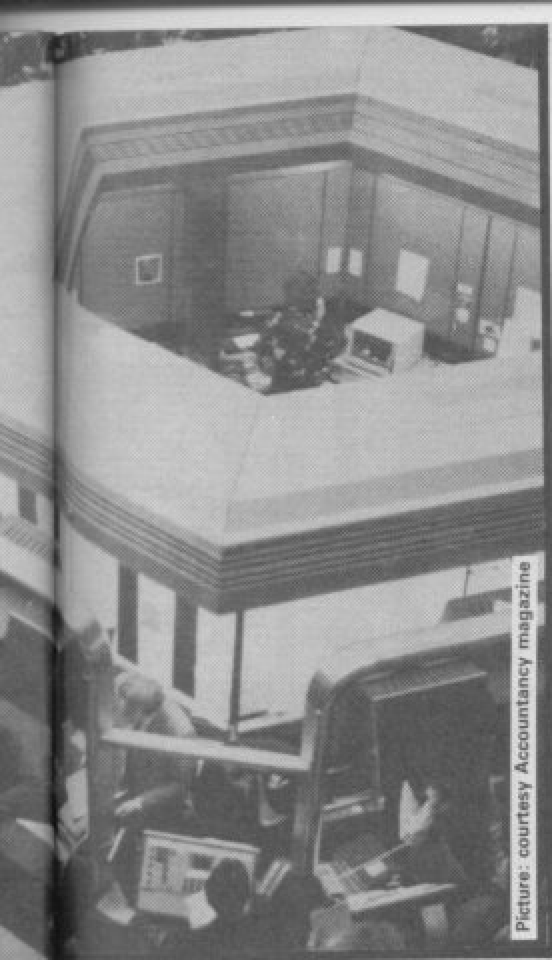
FACTS BOX

A sophisticated share tracking system. Despite great manual for serious investors as an aid for making MONEY

VALTRAK 4
Label: Morley Davies,
11 Denham Lane, Chalfont St Peter, Bucks SL9 0ER
Price: £24.65
Memory: 48K

Reviewer: Mike Wright

★★★★☆



Picture: courtesy Accountancy magazine

K4

is only stapled, this is one of the most readable I have ever come across. The explanations are simple and relevant.

I once said of an earlier version that it was for use by dedicated dabblers because of the amount of time and effort required. I have not changed that view although **Valtrak 4** with its extra features and increased speed is clearly now a very powerful tool■

SHARES

WORK-OUT REVIEW

Shares from Cottage Computing is a database of monthly share prices for the 48K with Microdrive. The database consists of a number of files on three cartridges each containing information on companies in industry groupings.

Shares 1 covers Banks, Beers, Building, Chemicals, Drapery, Engineering, Food, Hotels, Insurances, Leisure, Motors and Newspapers; Shares 2 covers Electricals, Industrials and Property while Shares 3 covers the remaining sectors.

On loading an automatic catalogue produces a list of data files that can be loaded. The file names are arranged with the number of companies on the file in the first three characters followed by the sector.

Shares uses the last twelve month's prices to prepare a statistical break-down of performance. To get the best from it you'll have to up-date all the prices each month, done by entering the number of the month followed by the latest prices for all the companies on the file. Once the prices are entered you get a final chance to check them all and re-enter them all if one is wrong. Then the program goes to work. The time for a monthly up-date of all the prices on a cartridge is estimated at somewhere over three hours. If this sounds like hard work Cottage Computing provides it's own up-date service for £2.50 per cartridge per month.

The information which the program extracts is limited to the latest share price for all companies on file and breaking out from all its data those firms whose latest price is greater then or less than it was twelve months ago. A list of companies where there has been no monthly share price drop can also be produced. This comparison is based on three month moving-average figures and it's also the only option where the data for the whole cartridge can be extracted at one go. For individual companies a histogram of the twelve month's data highlighting the latest, highest and lowest prices and the percentage change for the year can be drawn. A graph of the moving average price with the latest price superimposed completes the output.

Shares' attempt to cover an entire market has unfortunately been made at the expense of features such as details of holdings, that could have been included.

As a result the package falls between two stools■

FACTS BOX

Monthly share price database. Limited capabilities, doesn't match up to other programs available

SHARES
Label: Cottage
1 Elm Cottage, Randalls Hill, Lytchett, Poole Dorset
Price: £7.50
Memory: 48K

Reviewer: Mike Wright

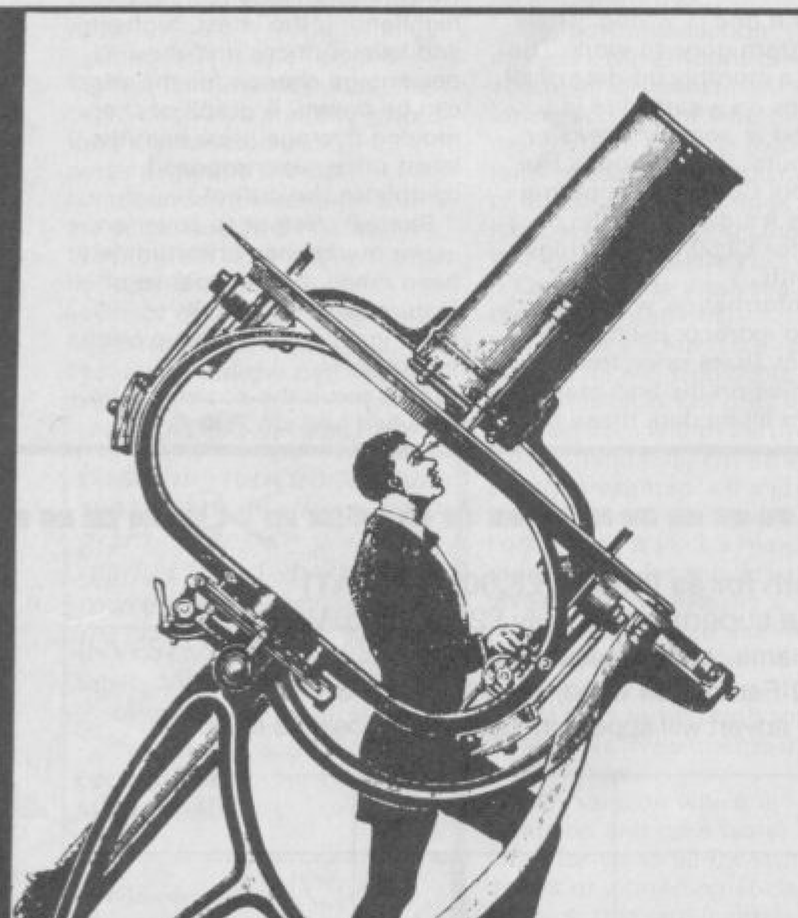
★★☆☆☆

NEXT MONTH

It's all in the stars



And so, another year passes gently by. Another twelve issues of SU are carefully filed away and added to the rich tableau that is history. What do the swirling mists of fate have in store for us in the New Year? We talk to a group of the Industry's biggest names and get their predictions for 1987.



We'll also be looking forward with the SU preview section to the games that are set to be the hottest around, and giving our customary no-nonsense verdict on the big games of the moment.

If your new 128K+2 is proving just a little difficult to control, our pull-out Guide For New Owners will help you get started. SU tells you what the manual was afraid to! Oblivious to the hate mail it will involve and we'll pick out the ten best games ever released on the Spectrum. New owners start your collection here!

Maps, Give us Maps you cry! Following the success of this issue's **Great Escape** and **Glider Rider** guides, we present a pictorial path through more top programs.

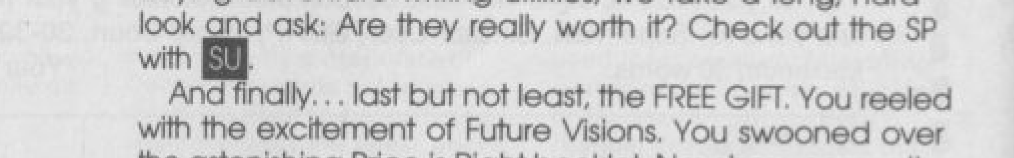
Adventure-writing is a funny old business. You may have some great idea for fiendish traps and maps and puzzles, but putting them into a computer is another matter entirely. With thousands of budding game-designers buying adventure-writing utilities, we take a long, hard look and ask: Are they really worth it? Check out the SP with SU.

And finally... last but not least, the FREE GIFT. You reeled with the excitement of Future Visions. You swooned over the astonishing Price is Right booklet. Now here comes the ultimate in free entertainment: **The Zapchat** Booklet. Ten of the hottest titles taken to pieces.

In 24 action-packed pages SU gives you the low-down on top games such as **Starglider, Avenger, Sacred Armour of Antiriad,** and many more.

As you can tell, the February issue is going to beat them all on everything – value for money, looks, style, news and views. It's a crime not to read it.

The February issue of SU, materialising mysteriously. January 18th, buy it!



PREVIEW

ARCADE | ADVENTURE | STRATEGY SIMULATION | WORK-OUT | TOOL-KIT



ON STRIKE!

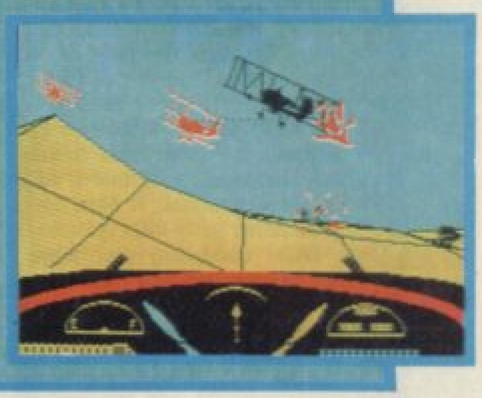
Deep Strike, from Durell is a novel addition to the massed ranks of simulator programs to emerge over the past months.

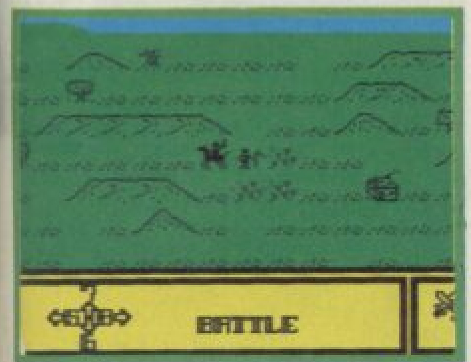
Instead of being told that you get to control the most advanced fighter in the history of flying, you get to fight it out with World War I bi-planes.

Your mission, should you choose to accept it, is to protect a bomber on its journey behind enemy lines. On the way you will come into contact with barrage balloons and enemy fighters, every one a hazard to be avoided at all costs.

The game has refreshingly simple controls (up down, left, right, fire and bomb) and allows you to get directly into the action. As you fly around, fighters will crop up from just about anywhere, and attempt to send you ground-ward in a cloud of black smoke. You will have to keep an eye on your fuel gauge and ammunition supply if you are to succeed.

Mainly you have to shoot things however. Rat-atat-tat etc, etc.
Streetdate: December.
Price: £9.95.





SWORD & THE GREEN GOO

Sword and Shield, from Black Knight software is very similar to Valley, the completely brilliant game about running a small village in olden days. Although littered with interesting features, it really comes down to the old routine – run a village, planting crops etc and hope too many people don't die of the amazing green goo that sweeps in from the north every 6 turns. . .

The game has lots of interesting additions to this plot, though. Battles crop up at the most inconvenient times, costing you men who could be put to far better use in the fields.

Dragons are rumoured to roam the lands where sensible people fear to tread, and the whole game looks rather impressive. If you try to rule too firmly, the proletariat may rebel, scarper off to the hills and hang out as rebels.

It sounds like just the thing to play on a cold night, when one's mind turns to power-crazed domination.
Streetdate: December.
Price: ££5.95

MAGIC KNIGHT STORMS IN

Here it is folks! The concluding episode of the wonderful Magic Knight Trilogy, from Mastertronic. First there was Spellbound, then came Knight-Tyme. Now, the tale continues in Stormbringer.

In this game, it is Magic Knight's task to defend the honour of his home town, which is being threatened by a malevolent force.

The force in question is the Off-White Knight, an opposing force whose ambitions are far from pure. In his quest for universal domination OWK decides the best place to begin an empire is the very heart of Magic Knight's domain.

Parking his time machine, OWK stumbles upon an empty castle, and takes up residence. The object of the game is to cast out the evil knight, and return him to his own universe.

The game features a variety of locations, from outside, and above ground, to the cave complex, through the castle and – ultimately – to the Off White Knight's time machine.

The plot seems every bit as complex as the others in the series. Puzzles are numerous and difficult. Objects must be collected, used and shuffled.

With a host of commands available (tickle, wish and smell being some of the most bizarre) Stormbringer **looks like a "biggie".**
Streetdate: Late December
Price: £2.99





BRIAN'S BALLS

Oh, for goodness sake! Yet another football game! Sometimes I sit for ages, wondering what the world would be like without football simulations.

CDS Software has just brought out Brian Clough's Football Fortunes **(titter). Not only does it involve the usual balderdash (eg selling players for ludicrous prices to other teams) but the package involves a 'board' (?). The idea is you and your mates play the game with both the board *and* micro.**

Apparently, the whole caboodle was written with plenty of advice from Brian himself.

And the worst part is still to come. CDS even dares to suggest 'players' should indulge in the absurd phrases as uttered by Sir Bri himself. 'Over the moon' indeed. Pah!
Streetdate: January
Price: £14.95

SIDE TRACK

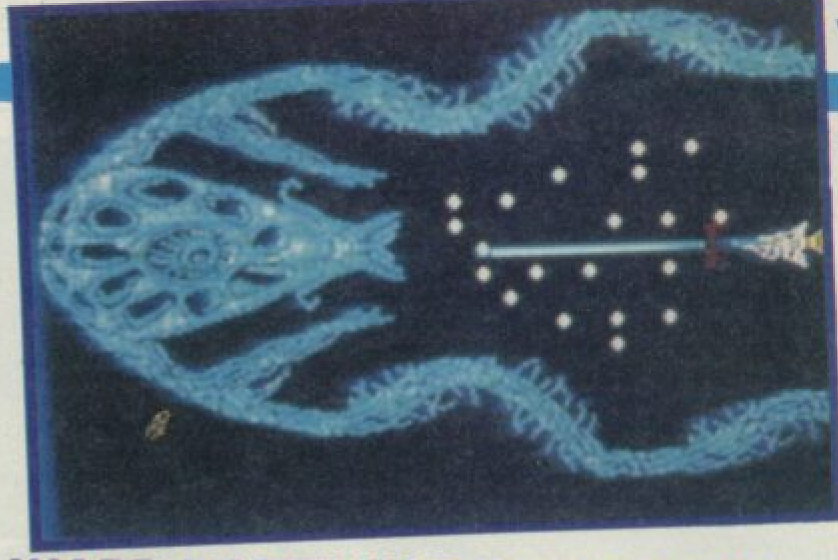
Everyone knows that as far as skittery-round-the-track race games go, Scalextric **is the best.**

More details on Scalextric **next month. But in the meantime, 'feast' your eyes on the following features:**

- **2 player game.**
- **split screen.**
- **3D graphics.**
- **Design your own tracks.**
- **17 pre-programmed tracks already included.**

Crazy stuff huh? It's from Scrabble authors' Lesure Genius.
Streetdate: December.
Price: £9.95.





NATTY SUPER SOCCER

Football games seem to pop up every now and again. After last month's report on Peter Shilton's Handball Maradonna, Ocean manages to pruduce the 'long awaited' Super Soccer.

Apparently, Super Soccer is the most realistic simulation yet. Although the game looks remarkably similar to a good deal of other soccer simulations, it does boast some rather natty little features.

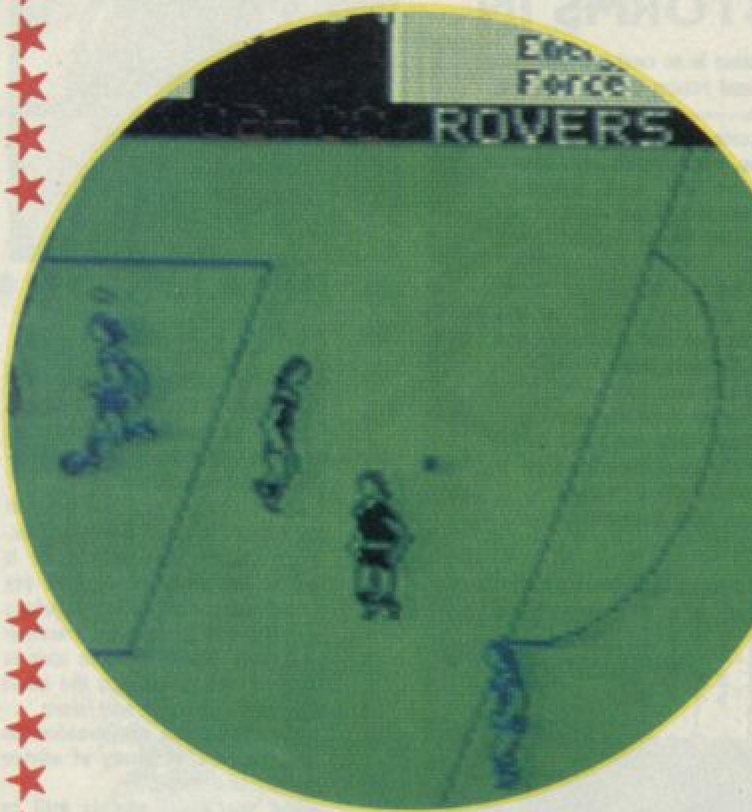
While controlling your player, you can belt left and right across the screen, running faster and slower at will, and stopping to make 90 and 45 degree turns, you can run yourself ragged with the flick of the stick.

It is possible to alter the team names, too and progress through a tournament, taking your team on to higher things.

A more unusual feature is that you can play as goalie as well as the other players, and try your hand at saving the computer-controlled shots. Perhaps this puts Handball Maradonna on trial for value-for-money?

A practice option is also included, permitting you to have a go at the game without being kicked to death by other players.

Streetdate: December.
Price £7.95



WARP RATTLING IN NEMESIS

Streuth! Look at these graphics. "Ha. Just another arcade picture, I bet." I hear you cry. Well, hold on to your horses, why don't you? This is Nemesis on the Spectrum from Konami.



The classic arcade game was once converted to the MSX, and was described as 'the best game ever on the MSX' which wasn't an altogether difficult feat to achieve. Well, now it's being coded for the Spectrum, and looks pretty impressive.

The storyline of this scrolling space shoot-out is simple. The World is about to be destroyed by an alien force. Gunning your Warp-Rattler space craft through alien defences, you must fly toward the brain of the advancing war-planet and destroy it. Will you succeed? Not ruddy likely, there are eight levels, each increasingly more impossible and a positive multitude of alien beings queueing up to kill you.

It's possible to employ a wide number of weapons, you have dual-direction lasers, shields, missiles and a speed-up mode. There is also a very bizarre feature allowing you to create another ship to join on to your own, increasing your firepower. Very odd.

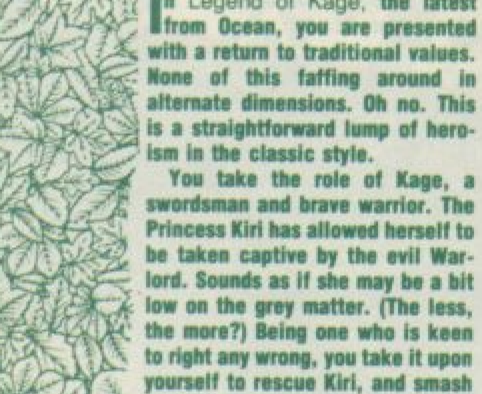
Streetdate: December/January.
Price: £7.95

STILL FAFFING ABOUT IN THE FOREST

In Legend of Kage, the latest from Ocean, you are presented with a return to traditional values. None of this faffing around in alternate dimensions. Oh no. This is a straightforward lump of heroism in the classic style.

You take the role of Kage, a swordsman and brave warrior. The Princess Kiri has allowed herself to be taken captive by the evil Warlord. Sounds as if she may be a bit low on the grey matter. (The less, the more?) Being one who is keen to right any wrong, you take it upon yourself to rescue Kiri, and smash the Warlord.

Setting off through dense forest,





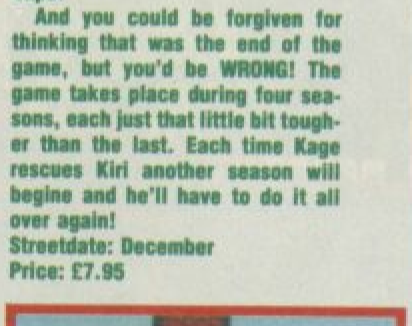
Kage (Japanese name, so pronounce as if you are cross and in pain) finds himself in mortal combat with an assorted bunch of fiendish Ninjas. Climbing the trees, and using his sword-wielding prowess he must battle his way to the second stage – the moat. After swimming through the moat, Kage will encounter castle walls.

As you fight through the different levels, you will encounter all sorts of evil monsters. How do you fancy coming up against a horde of utterly evil wizards?

Finally, as you reach the top of the castle, you must rescue the princess and make good your escape.

And you could be forgiven for thinking that was the end of the game, but you'd be WRONG! The game takes place during four seasons, each just that little bit tougher than the last. Each time Kage rescues Kiri another season will begine and he'll have to do it all over again!

Streetdate: December
Price: £7.95





LOCH OUT FOR NESS

Terror of the Deep, from Mirrorsoft sounds like a very peculiar little game indeed. It is necessary for you, as a late nineteenth-century explorer's apprentice, to investigate the mysterious happening in Loch Ness.

The great man, your hero, has become ill, and summons you with his dying breath in order to pass on the "terrible responsibility" that his quest entails. Strange things have happened in the Loch. Sailors have vanished without trace, and the locals are getting decidedly miffed.

Placing you in charge of his old, but valuable, submarine he says



PREVIEW

SHOCKING!

Shockway Rider – the follow-up to FTL's hit Lightforce – is a bizarre little game.

The storyline and plot are amazingly simple: you have to ride the moving walkways around a futuristic city, avoiding the obstacles placed in your path.

The object of the game appears to be simply to ride the walkways for as long as possible without falling off.

As well as numerous gangs of youths who roam the walkways, the player must combat the police who are decidedly unpleasant.

The game will feature numerous scrolling windows, used to simulate the walkways' varying speeds. Graphics are pretty whizzy, too, with a large central character.

Looks like a severe case of stick-wiggling will ensue when the game appears.

Streetdate: End of December
Price: £7.95

PEACE LOVIN' ZYRONEANS IN SF KAYLETH!!

Kayleth from US Gold is an adventure. The Zyroneans were a peaceful race until the evil Kayleth arrived and everything went decidedly sour. It is your task, as a loyal Zyronean – Oh God, no. Look, I can't stand any more of this. I thought this job would be really easy and everything but all I get to do is sit at this typewriter talking about advanced civilisations, when you all know that it's completely untrue. (Get on with it – Ed)

Anyway, it materialises that this Kayleth character is a real pain, and you've got to get rid of him. How do you do it? Simple, you type commands into a little black box with rubber keys.



It's possible to type in whole sentences (Invert the banana and sharpen it with the branch) and even talk to some of the characters in the game if you feel like it.

Kayleth is programmed by the people who used to be called Adventure International, until US Gold bought them up and called them Adventure Soft. It features some rather natty graphics too.

Apparently, Kayleth has something to do with Assac Asimov. Probably one of his ropey magazine stories. If you're into overthrowing tyrannical overlords with odd names, Kayleth promises to be worth a look.

Streetdate: December.
Price: £8.99





that it's your duty to explore the Loch and discover the enormous creatures which, it has been rumoured, live there.

The game looks vaguely like RMS Titanic. The screen is presented like the inside of the submarine, with a view of the outside world, moving around in 3D. Various dials and gauges move on the display, indicating all the important controls.

In case of an attack from unpleasant underwater monsters, you are armed with a harpoon gun, with which you can prang any aquatic life-form in view.

As depicted, the game looks pretty ruddy murky, which means that it will probably be a big success. (?–Ed)

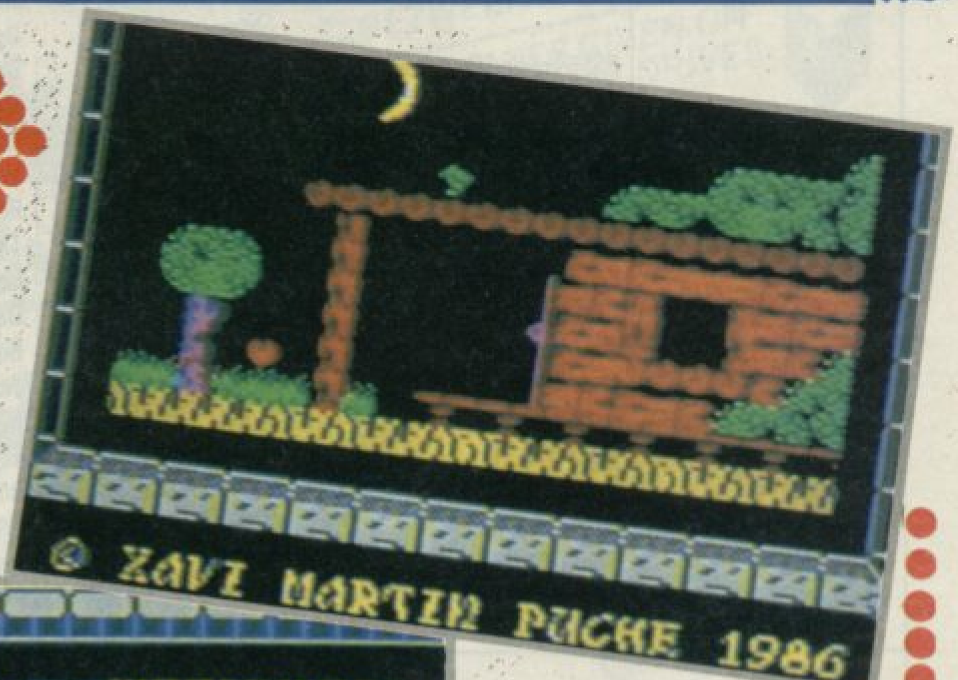
Streetdate: March
Price: £7.95

ROCKMAN GRABS THE GRAIL

Da-daaa! Here's Rockman! The latest game from Alligata features the best-looking macho hero ever found in a computer game. Well, this is what they would have you believe. As a matter of fact, he has the most useless grin, and some truly horrific clothes.

Anyway, moving swiftly away from all this tosh, Rockman – for it is he! – is happy and contented sort of bloke, until he is called to the King of Spain's bungalow, and informed that a really bad thing happened the other day. "The Holy Grail has been nicked," said Kingy, "and we're in a right old state. Get on yer bike and get it back from that loony in the hills."

"OK," said Rockman.





Rockman will have to use all of the knowledge gleaned from the old man to recover the Grail. (There's always an old man in these things. You know, the sort of guy with puffy eyes who can't speak well, but is really clever.)

Rockman is a graphic adventure (don't ya just know it) featuring big graphics and lots of colourful things to jump about with.

Streetdate: early January.
Price £2.99

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Uridium	£8.95	£8.15	☐	£7.20	☐
Dragon's Lair	£7.95	£7.15	☐	£6.35	☐
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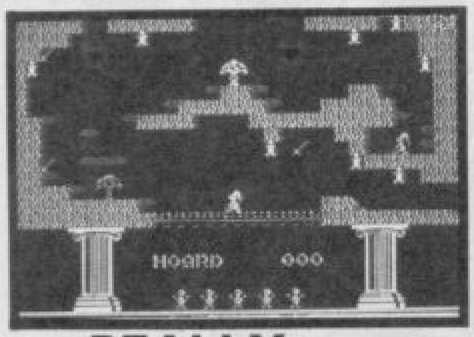
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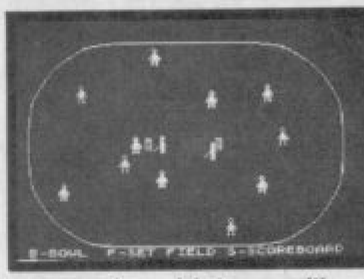
PREVIEW



REALLY ALTERNATIVE

Hurrah! A tad of sensibility has just appeared in the shape of two budget games from Alternative Software. . .

Henry's Hoard is a straightforward platforms and ladders game involving Henry, fifty locations, 200 items to collect and stacks of traps.



Howzat is a cricket game with graphics, bowling option, field changes, name changes, skill factors, scoreboards and match analysis.

Each game costs under £2 so you can't really go wrong.
Streetdate: December/January.
Price £1.99

WHAT IS IT GOOD FOR?

Wargames are still astoundingly popular. PSS has just released two titles based on the mutilation and destruction of other human beings. Not being the sort of mag to take a political stance on such matters, SU is quite happy to preview the games.

The first is Annals of Rome, and is based upon the struggle of the Roman Empire to achieve world supremacy. The game should be a delight for wargamers and megalomaniacs alike, featuring things such as "fiscak problems" and a "phase game".

Battlefield Germany is more straightforward. The commies are invading West Germany, and it's up to you to stop them. The game features a nuclear option, which has presumably a similar effect to the Quit option in similar programs. An interesting feature is that it is possible to take the role of the Warsaw Pact, and attempt to overrun the den of capitalist hypocrisy in one fell swoop, introducing the world to the wonders of communism.

The games are based on the familiar wargaming foundations, and provide a couple more wars to wage with your Spectrum.
Streetdate: November (both)
Price: £12.95 (each)

Annals of Rome
Price: £12.95
Streetdate: November.

WAR WALLY

The thunder of an exploding CS cannister, the smell of noxious gas in your nostrils, the flare from the muzzle of an Heckler + Koch 9mm. It's all go as a member of the SAS. Up and down those ropes all ruddy evening, and zooming about in those brilliant helicopters. It's Mikro-Gen's latest, SAS Strikeforce.

A very nice man in a Milk Tray advert costume swung into the Preview Suite at SU towers, with a copy of the game which has been on Mikro-Gen's lips for ages. The idea is to carry out a house clearance, using bombs and guns, and get rid of some of those undesirables who occupy various locations throughout the game.

Apparently, the program was developed with the co-operation of the "lads", and we reckon it could be one of the big sellers of the coming months. The only problem is that the screen does bear stunning similarities to other Mikro-Gen games.

Wally Goes to War?
Streetdate: December.
Price £7.95

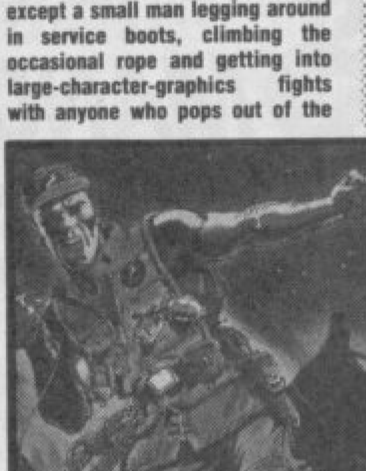
SOOPER!

Dum dum dum diddle-de dum dum dum. . . From the ranks of the super-killers comes a man stronger than any other, tougher than any other, rougher than any other.

The year is 2108. On a distant planet, the inhabitants of a solar system struggle to negotiate a peace-treaty. Everyone knows that this is their last chance.

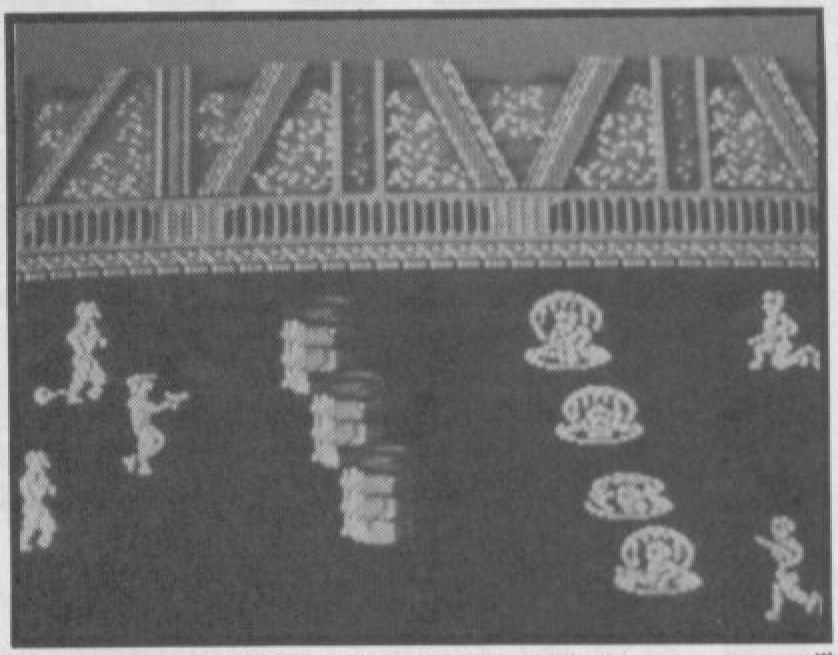
You are Trooper. The man leading the Earth delegation. After uncovering a plot to scupper the negotiations, you learn of the aliens' plans for over-throwing the universe by controlling helpless minds. . .

Deary me, readers. They Call Me Trooper is a 128K game from CRL featuring very little indeed except a small man legging around in service boots, climbing the occasional rope and getting into large-character-graphics fights with anyone who pops out of the alien landscape.



"There is one priority in your mind," burbles the useless introduction, "escape from planet Therop ALIVE!"

Trooper looks a cross between Jet Set Willy and a karate game.
Streetdate: December.
Price: £8.95



KONAMI DRIVE

This is Konami Jailbreak screen shot. The firm promises us that the game is 'nearly ready' and it has been inundated by people calling trying to find out when it will appear. It doesn't look too bad, in fact.
Revised Streetdate: really soon, honest.
Price: £7.95

STUDIO OF THE FUTURE

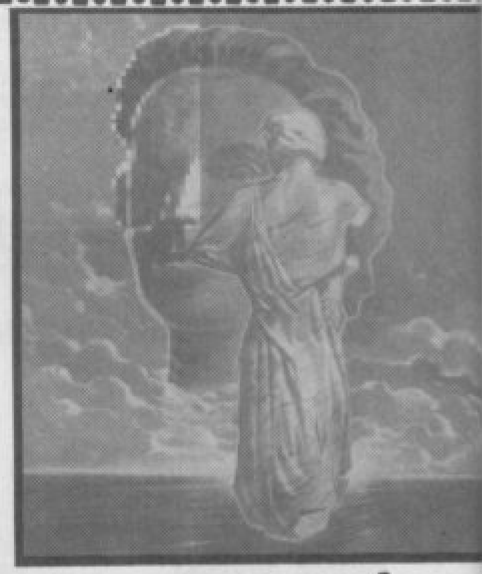
Advanced Art Studio is for the 128K + 2 only, and comes from Rainbird.

The program is really, really clever and can do lots of very useful things like, um. . . well. . . you could use the Ramdisc feature, and make the program remember what you were doing without saving it or. . . er. . . create a scrapbook with lots of family photos or something. . .

(Computer Art Buff interrupts: In fact, the Scrapbook is a genuinely interesting feature, allowing the user to select a certain section of the screen, and then move that area to a different 'page'. The process can be repeated allowing the more useful blocks of the screen to be stored in a small space, and then re-created at will.)

You can also use the completely brilliant Font Editor, where you can create those completely fantastic (if illegible) text fonts and put them on your art stuff. Pretty cool, huh?

The *Fill* routine is better now, too. You can design your own pattern and when you hit that button whoosh! There's an *Arc* feature. The world would be pretty straight without curves, right? Well, you can do lots of real crazy stuff and, like, bend things too.



(Art buff again – by fixing two points, designating the start and end of the arc, and a third showing the extent of curvature, the program will construct the desired curve.)

All of the features in the original program are included, too.
Streetdate: December.
Price: £24.95

CHECK OUT THE FAX

Zarjaz it may be, but the style is very much SU.

This is the latest press release from those astoundingly pleasant people at Ariolasoft. While you're reading, take note of the intriguing text style found in preposterously large quantities in the pages of SU. What does this mean? Search me.

FAX McSHEEN BLASTS HIS WAY THROUGH SPACE . . .

A distant future date . . . a Zone of space is discovered not obeying the normal laws of the Universe (tut!). The entrance to the Zone leads out of our universe and into a weird cone-shaped area of space.

Our hero, Fax McSheen (you), is despatched from Astro College to investigate in a large flying saucer with rocketty things on the back (who wrote this garbage? — Ed). He is accompanied by three attack Drones which he soon realises can only be controlled by him if he keeps them in sight (errant children need taps on backsides etc. etc.). Unfortunately for the lazy Fax, this means following the Drones into the Zone and destroying planets and other 'bodies' that get in his way.

CONTINUED NEXT WEEK . . . (OR INSIDE!)

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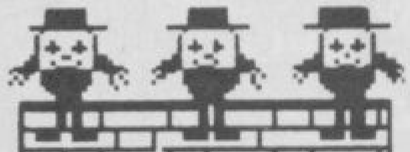
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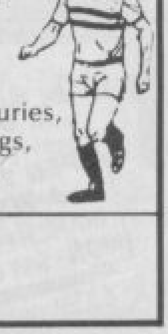
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C+VG (July) *"Fancy a Bit of Arcade Fun for £4.50? Then ASTROCADE on the Spectrum from D.D.S. Software could be for you. The six games on offer are Simeon, Caverns D'Or, Bomber, Zombies Luna-Rover and Alien".*

Your Sinclair (July) *"They are all very playable. The graphics are adequate, the sound excellent".* Addictivness 7/10: Playability 8/10: Value for money 8/10.

CRASH (June) *"Overall the ASTROCADE Collection should keep any games player quiet . . ."*

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GREMLIN'S

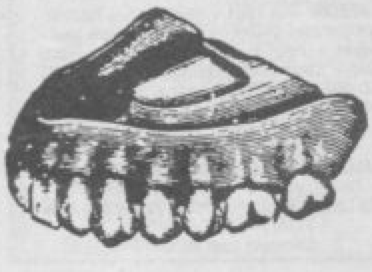


Have you noticed how many people talk about their machines by beginning "I'm the proud owner of a humble Spectrum"?

This led *Gremlin* to ponder, if one could be proud of a humble Spectrum what adjectives might be most suitable for other computers. Here are a few suggestions:

- "I am the Filofax-owning owner of an arrogant Amiga"
- "I am the serious owner of a very dull BBC B"
- "I am the wealthy but uninformed owner of a new BBC Master Compact"
- "I am the bewildered owner of a declining 6128"
- "I am the easily fooled owner of a brand new Commodore 64C"
- "Hello, I've got an Oric, Is there anybody out there?"

Gremlin invites readers to send in their own ideas which will be either printed or ignored.





"Having saved Beyond Ariolasoft need me"

Behold Francis Lee, aka Lieutenant Witherspoon to Beyond's **Star Trek** (see *Gremlin* November)

Francis left Beyond and momentarily disappeared only to reemerge like an express as Starlight.

Starlight, it seems, is a new software house producing 'quality software on both 8- and 16-bit machines'. It seems to be living inside Ariolasoft and indeed Ariolasoft will be licencing Starlight products.

Some people regard Ariolasoft as a company 'most likely to' (most likely to what? You ask? Only lawyers prevent *Gremlin* from explaining) and Francis is, um, a surprising person to join up with.

One thing is certain though, Francis has the ability to make foot in mouth statements on a par with dear old Ronnie himself. He says "I am confident that with the addition of Starlight and other forth-coming developments, Ariolasoft will soon become a market leader across Europe." *Gremlin* though Ariolasoft, via it's huge German parent, was a European market leader already.

If it is not, how is Francis' new software house going to make all the difference? I think we should be told.



"Well the gun looks OK but I'm afraid your moustache is completely ridiculous." (Fergus McNeill and Jason Somerville do silly things for Murder Off Miami)



Time for a fresh look at the old computerlingo speak. Gremlin computes.

The ol' data base of reference tokens needs to be up-dated. Here are the latest translations:

Megagame: software house is charging more than £9.95 for it

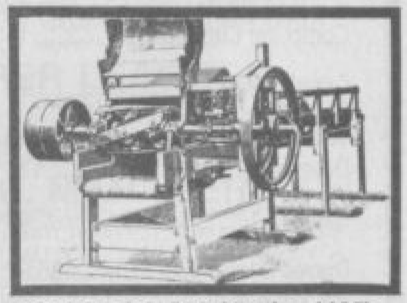
Budget title: 'There's no way we can get away with a full price tag on this one'

Saucy: Contains a breast, probably female, constructed from five pixels

15 rated: Clement Chambers'

GREMLINS FOR 1987

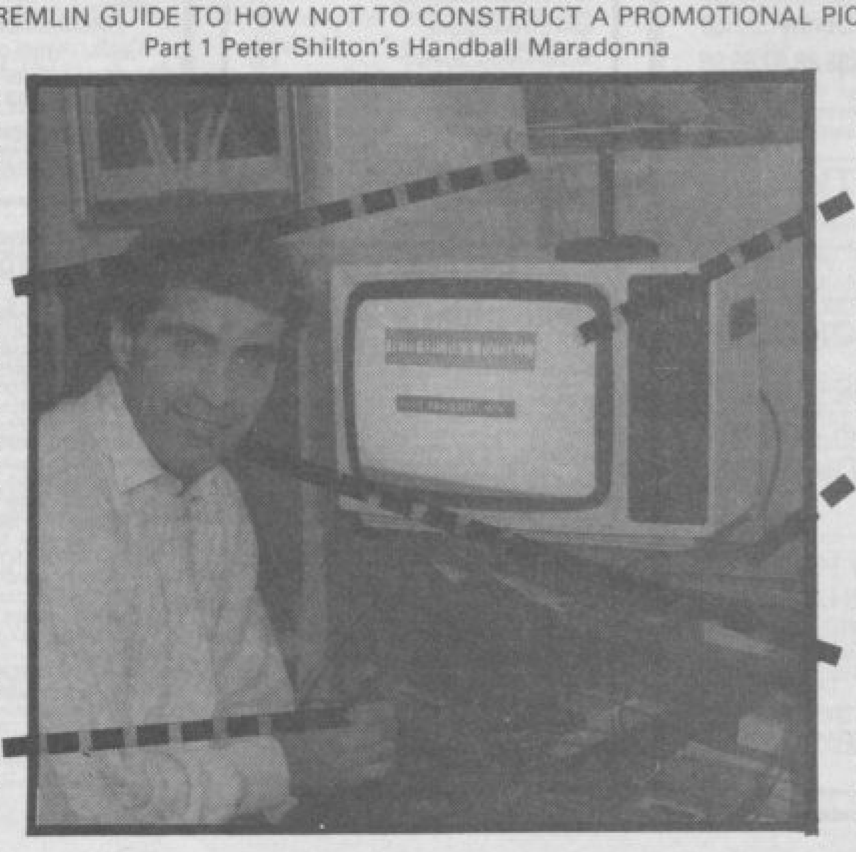
- **Amstrad will produce a Spectrum with disc drives that will not be compatible with any existing disc software.**
- **Sinclair Research will finally produce Pandora and it will not be compatible with anything including the United Kingdom mains system (Sinclair will offer to rewire your house to make it compatible with Pandora for £49.95 plus VAT)**
- **Star Trek will be released three months later than the latest date anyone imagined it would be released.**
- **The best Spectrum games of 1987 will be better than the best games of 1986. The worst games will be at least as bad.**
- **The world will not end**



Pandora for £49.95 plus VAT



THE GREMLIN GUIDE TO HOW NOT TO CONSTRUCT A PROMOTIONAL PICTURE:
Part 1 Peter Shilton's Handball Maradonna



Name of game: Peter Shilton's Football. **Whatever happened to the** Handball Maradonna **bit**

These curious cropped pictures take journalist's gaze away from the central action

Mysterious in-door TV aerial. Does Peter really watch TV in this position?

Peter has an old style Spectrum – unconvincing

Limp joystick grip suggests Peter is not excited

Screen could not be more boring – no action whatsoever, suggests game was not ready when picture was taken. Also implies that Peter Shilton has been practicing

MFI style computer desk – not associated with game credibility

Fixed uncomprehending grin suggests 'I have been told to smile at the camera and hope I can get away soon'. Peter would not be very successful should he choose to play the game in this position

'S JARGON GUIDE

ridiculous publicity stunt (lots of red pixels)

Classic-style adventure: Lots of pixies but no graphics
Hilarious adventure: Only a few pixies, written with the Quill, not funny with, poor graphics
Monster memory: 128K **Action-packed program:** Firing at things
Ultimate arcade game: Firing at things and dodging things
Disappointing response: Even the journalists sent their review copies back
Original game: Looks weird but isn't fun to play
Whacky: Totally terrible in every way without any redeeming features whatsoever
Licencing deal: Licence to print money or – as insult – a very, very bad game
Multi-channel sound: Da,a,a,a,a,a,de,e,e,e,e,e,e,do,o, o,o,o, etc
Sampled speech: MisarrrrwwllllsLanchhheeeed
Real-time: No *Pause* button if the phone rings

"Don't push me, I'm not that far away from the edge."



Some things become *Gremlin* material, other things have *Gremlin* status thrust upon them.

Still others cry out to be included.

This promo pic from CSD is such a one. Never has there been a more posy photograph of a programmer (unless of course you know different). How on earth was Mark Rivers persuaded to look like a complete prat?

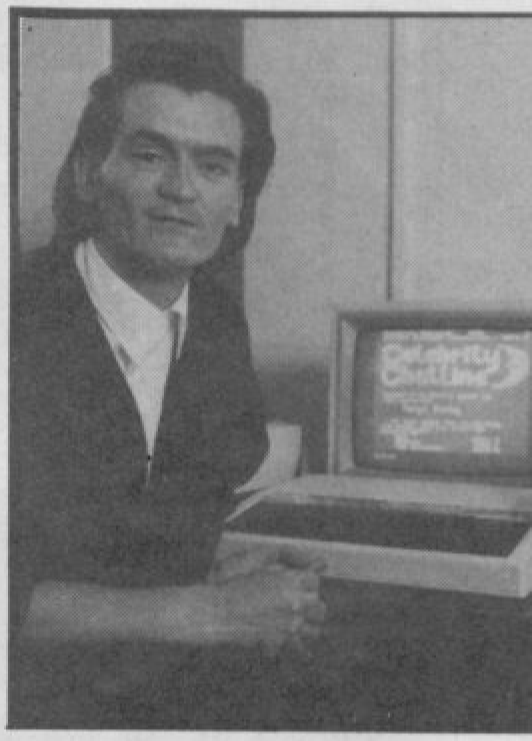
Someone in CSD obviously decided that Mark was marketable material, this was almost certainly because he is one of the very few programmers that has what can only be described as tall hair. Not only does he have tall hair but he has dark sunglasses.

Clearly he's a street urchin living for the moment, drivin' down the fast lane (note the shark's tooth earings showing that he's a dangerous character). Gremlin wouldn't ordinarily mock someone who could go unnoticed in, say, the pages of *Sounds* but Mark has adopted the most astonishingly ridiculous 'I am mean' pose. Of Mark's games and character *Gremlin* can make no comment except that they are said to be 'action packed and super sophisticated' and will 'stun the world'.

Personally *Gremlin* thinks Mark would be better off trying to stun (possibly permanently) the people who write press releases about him

Gremlin

CAPTION COMP No 3



Good grief. Last month the caption competition gave you only about three and a half days to get your ideas in and yet they flooded in.

Some of them were even funny. Feargal seemed to inspire you to new heights.

Ideas were a mixture of insults directed towards the mighty BBC computer in the background of the picture and jokes based around titles of Fergies (some mistake?) greatest hits.

An example of the latter being 'That was Dr Barnard asking if I'd found a good heart' from S McCarthy of Newark (How are you Steve?).

Alas most of the insults to the BBC computer were far too rude to print. *Gremlin* was quite taken with "I think I've just sat on the joystick' from Steve Spiers of Oxford just because of the fact that Feargal does actually look like this might be his problem.

George Ward's 'Hello do you know me?" was liked as an access joke as we 'I knew I should have put on a tie this morning' from D Roberts of London.

However the winner, for economy of words, and general sarcasm comes from Chris Alauoine (if this is wrong you only have your writing to blame, Chris) of Rockford in Essex who penned "OK then guys, where's the celebrity?". Chris gets the usual cash reward.

And finally. Another year has passed, many hands make light work and a stitch in time saves nine.

You know, sometimes we all complain a little don't we, we have out little upsets and our victories, but now, at the end of the year, it's time to forget life's little difficulties and give thanks.

At SU there are so many things for us to give thanks for. Some good software to review, Jeffery Archer's resignation, Faster Than Light for easily the best sweat shirts we've ever seen.

Thanks obviously to all of you for all the praise (and blame) you've hurled at us.

But most of all we'd like to thank all the guys at Crash! for the tremendous support and coverage they've given us in their magazine recently and for all their incredible efforts in helping us to increase our readership.



This month's picture shows Anita Sinclair, Princess of power at Magnetic Scrolls selling/bribing/showing Sir Clive a copy of the Pawn. So here's your caption task this month: Who is saying or thinking what? (Note: juvenile sexist comments might be sniggered over in the office but won't be printed and won't win and that's that. £20 for the winner.



Send your offering to Gremlin Caption Competition No 3, Sinclair User, Priory Court, 30/32 Farringdon Lane, London EC1R 3AU. Entries must reach us by 7th of January, which an incredibly long time for you to come up with the goods.

Name..

Address..

....

Caption (max 12 words)..

Any more realistic and you'd need insurance to ride it.

There are two guys in front. One coming up from behind. And another just off your elbow. The screams of the bikes are deafening.

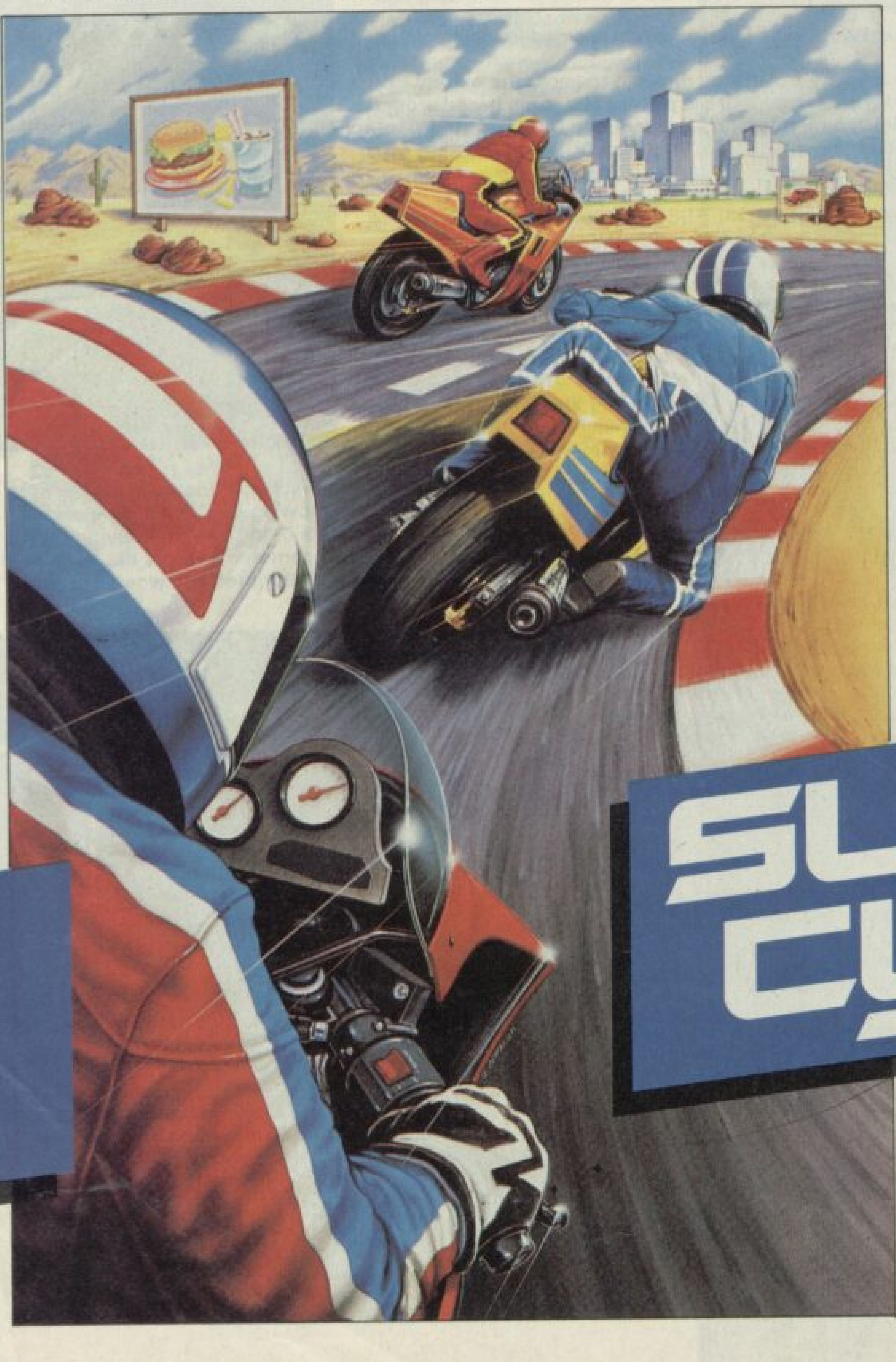
The wind is pulling your face off your head. Your adrenaline is pumping like Hoover Dam.

You kick your bike to the right. He's bumped. He's flying. You push on.

Take your eyes off the road for a millisecond, and you could end up a *part* of the road.

It's all a blur. No time to think. You've just gotta pump it. The next turn's the steep one. Bank, bank! The curve's wide open, but the screeching wheels of the bike in front are kicking gravel right in your...your...

You hear a phone. A phone? Hey, wait a minute. This isn't a bike. It's a chair. It all comes back now. Yes. You're home. The pizza's here. The computer's on. Looks like it's going to be another quiet night after all.





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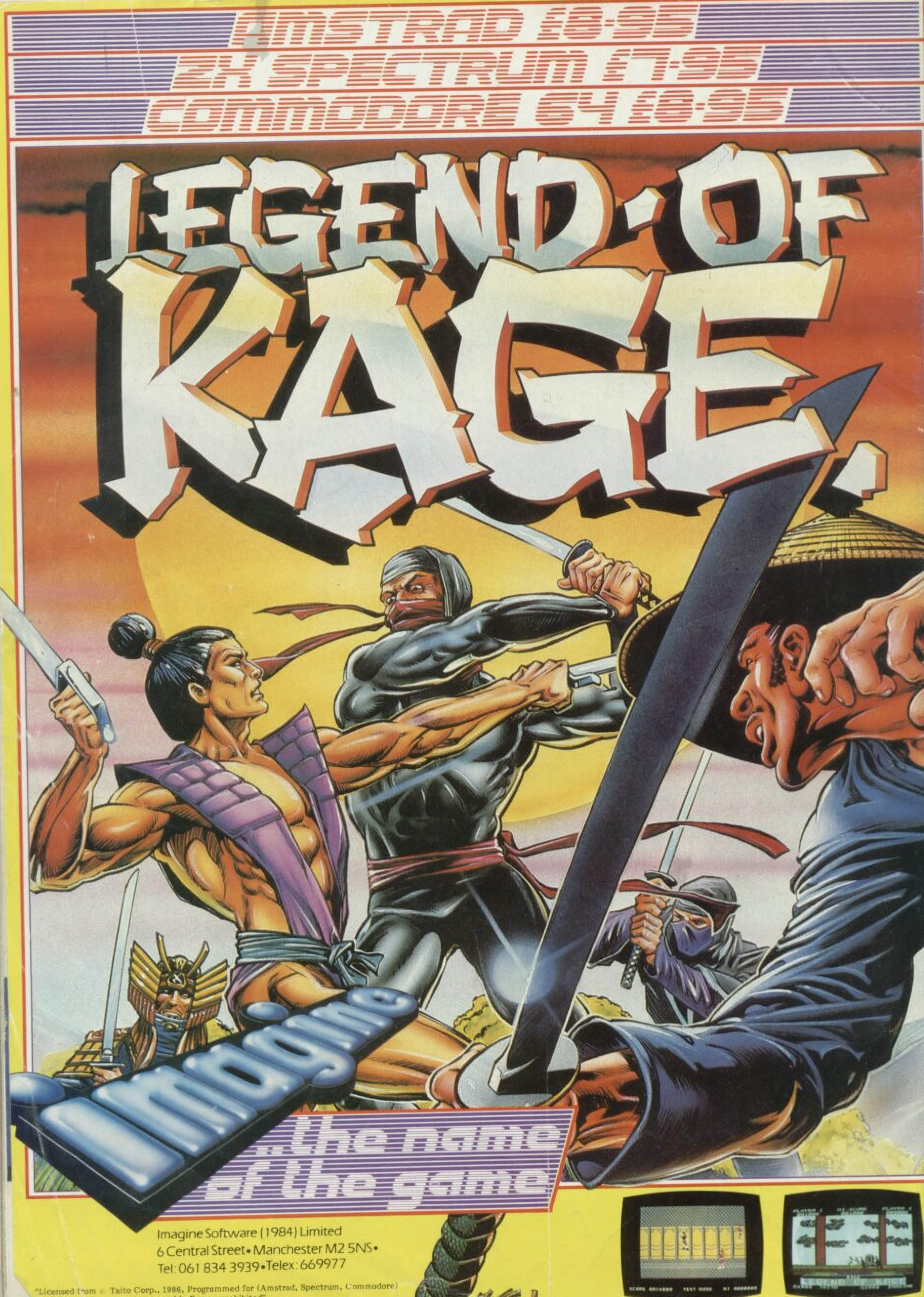
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